Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC

In the matter of:	)	
	)	RM No. _____
Amendment of Parts 73 and 74 to further	)	
implement the Local Community Radio Act	)	MB Docket _____
of 2010 and make other improvements to the	)	
Low Power Radio Service.	)	

PETITION FOR RULEMAKING

SUMMARY

In this *Petition for Rulemaking* (Petition), REC Networks (REC) is addressing various issues that had been precluding a more successful deployment of Low Power FM (LPFM) stations, especially in suburban and core urban areas. In this *Petition*, we will note that two of the main causes of this preclusion is as a result of unnecessary overprotection of other broadcast facilities by LPFM stations as well as disparity in the relationship between LPFM stations and FM translators, two services that are generally "equal in status".

In this *Petition*, REC proposes to create a §73.815 Regime of protection for protecting full-service FM, Class D, FM translators, FM boosters and other LPFM stations which is available to LPFM stations that specify locations that do not meet the current distance separation requirements of §73.807.[1] Under the §73.815 Regime, LPFM stations will be able to protect other radio broadcast facilities using contour overlap. To remain in compliance with Section 3(a)(1) of the Local Community Radio Act (LCRA), we propose a lower minimum distance separation requirement that is used in conjunction with the contour overlap. This reduced

[1] - Throughout this *Petition*, you will see many references to a "Regime". The "§73.807 Regime" is the current LPFM service that we have right now where all protections between LPFM and domestic facilities are handled in §73.807(a) through (c). The §73.807 Regime is the status quo. The "§73.815 Regime" is the proposed protection method that is contour-based. REC is proposing these rules in a new section §73.815. Due to an LCRA requirement, a shorter (LP-10) distance separation to domestic full-service FM stations is used. This is somewhat similar in concept to §73.215 which applies to full-service FM stations. There is no minimum distance separation to FM translators, FM boosters or other LPFM stations. These facilities would be handled solely by contours.

distance table is based on the LP10 distance separation chart that was codified on the day when the LCRA was signed by President Obama and enacted into law. This type of arrangement is similar to §73.215 except that full-service stations will not be considered full facilities since unlike §73.215, an LPFM station can't prevent a full-service station from modifying their own facility. In exchange for this flexibility, LPFM stations using this regime would be subject to a higher level of interference scrutiny similar to what applies today to FM translators.

We also incorporate our previous proposal to expand the LPFM service to 250 watts ERP into this *Petition*. REC will propose that for LPFM stations wishing to operate at an ERP greater than 100 watts at 30 meters HAAT, the LPFM would be required to specify protection under the §73.815 Regime and must protect all broadcast stations using contours and to be compliant with the LCRA, full-service FM stations would also be protected using LP-10 minimum distance separation. As noted in the case studies outlined in RM-11749, there are LPFM stations that are currently experiencing issues with building penetration even within their primary service contour. A part of this can be attributed to lower antenna heights and lower power used by LPFM stations.

It is important to point out that existing LPFM stations that wish to remain under the under the current "LP-100" §73.807 Regime that has existed since 2000 can do so under this proposal. They may file modifications that remain compliant with today's LPFM service and they will keep all of the protections and interference responsibilities including those in §73.809. It is REC's intent that at the time of future filing windows, the §73.807 Regime will also be allowed. During a future filing window, we expect both §73.807 and §73.815 Regime applications to be filed, especially since this rulemaking will make some spectrum available in urban areas that would only be available in the §73.815 Regime due to relaxed distance requirements rules. LPFM stations that use the §73.815 Regime would be subject to interference handling rules similar to those of FM translators.

Recent events in the industry have called attention to issues related to Section 5 of the LCRA which states that LPFM and FM translators are "equal in status", secondary to full-service stations and that licenses must be available to both services based on community need. In this *Petition*, we are putting in options where LPFM stations will have a technical relationship with

FM translators in a manner similar to how FM translators have with LPFM. This is being proposed in a manner that is consistent with the LCRA. The use of the §73.815 regime would address the "short-spacing" issue brought up by a different LPFM advocacy group. Also, with the §73.815 Regime, Section 5 is being satisfied by making more spectrum available for LPFM including in hard to accomplish markets like New York City.

While LPFM will not have a full equal relationship with translators (because of the second adjacent channel protections which are in statute), we are proposing changes that are not affected by the LCRA which will bring LPFM to a level closer to FM translators while maintaining LPFM's hyperlocal identity. This includes replacing rules that massively overprotect lower-powered Channel 6 stations with a method similar to that used by translators. We also propose to allow minor moves for LPFMs to the same distances allowed to translators and proposed to extend the construction period to 36 months for all construction permits without the need of an extension request.

This *Petition* also addresses issues raised by REC in MB Docket 17-105 that are not related to the LCRA such as changes to the rules regarding assignments and transfers to allow for unbuilt original construction permits to be "rescued" and to prevent cancellations of licenses by removing the three-year waiting period on assignments. Additional safeguards need to be put into the assignment and transfer processes to prevent gamesmanship both during the original filing window and during the actual assignment process. This *Petition* also asks for the codification of service rules in connection with FM boosters for LPFM stations given the success of KWSV-LP-1 in Chatsworth, California. We are also requesting some changes to the rules regarding FM translators cross-owned by LPFM stations in order to eliminate redundant rules and provide these translators, which already have restricted reach some additional flexibility in program delivery. Finally, we are asking to expand the use of directional antennas in LPFM to accommodate the §73.815 Regime and more options to maximize service while meeting international agreements.

This *Petition* is intended in part to promote Section 5 of the LCRA without disrupting the application process nor putting the issuance of any new Auction 99 or Auction 100 FM translator

license at risk. It is REC's position that community need was met with some of the recent new FM translators from Auctions 99 and 100 that are for Class C and D stations, especially those that are stand-alone stations, in rural areas and/or are owned by women or minorities. Now, it is the top of the second inning and LPFM is back up to the plate again. This *Petition* could be seen as a starting point to prepare for another LPFM filing window however, first, it would be important to allow existing LPFM stations to upgrade or make changes in accordance with these proposed rules in order to relieve interference and other performance issues as well as for LPFM stations in more suburban and rural areas, to extend their reach to better cover their local communities.

REC thanks the Commission and the Media Bureau staff for their time on this issue and we look forward to helping our current LPFM stations improve their service and prepare for the next generation of LPFM stations.

TABLE OF CONTENTS

AVAIABILITY MAPS FOR MAJOR MARKETS AVAILABLE FOR VIEWING AT:
http://lp250.com

PETITION FOR RULEMAKING

I. INTRODUCTION

1. REC Networks[2] ("REC") strives to assure a citizen's right to access the airwaves and strongly advocates for the Low Power FM ("LPFM") broadcast service. For the past few years, REC has been a primary voice supporting the establishment and day-to-day operation of LPFM stations. Much of the material in this *Petition* was placed in the record in 2017 in the Commission's *Modernization of Media Regulation Initiative.*[3] Based on the outcome of Auctions 99 and 100 as well as other recent events taking place involving LPFM's relationship to translators and enforcement of Section 5 of the Local Community Radio Act of 2010[4], REC feels that it is necessary to bring various LPFM issues forward for consideration for rulemaking. For the purposes of this *Petition,* we will include a legislative history of LPFM and an analysis of the specific sections of the LCRA that would apply to this specific rules and topics being addressed.

II. LEGISLATIVE HISTORY OF LPFM

A. Radio Broadcast Preservation Act

2. When LPFM was first created by the Commission, it was created without a requirement that LPFM stations protect other broadcast facilities on third-adjacent channels.[5]

---

[2] - REC Networks is the unincorporated entity name that identifies Michelle Bradley. REC is a major advocate of the LPFM service and operates various resources such as FCCtoday (http://fcc.today), FCCdata (http://fccdata.org) and has a significant amount of resources available at http://recnet.com.

[3] - See *Commission Launches Modernization of Media Regulation Initiative.* Public Notice. 32 FCC Rcd 4406 ("PN") at 1.

[4] - Pub. L. No. 111-371, 124 Stat 4072 (2011) ("LCRA").

[5] - See *Creation of a Low Power Radio Service,* Report and Order, 15 FCC Rcd 2205 (2000, "R&O") at 104.

This was a concept unheard-of at the time and interests representing full-service broadcasters expressed deep concern about the possibility of interference by the new LPFM stations.[6] There was also a very deep resentment of the new LPFM service because of the surge in radio piracy that took place in the late 1990s following the passage of the Telecommunications Act of 1996 which created unlimited national ownership which allowed companies such as iHeart Media (then Clear Channel) to thrive, shutting out local and regional ownership opportunities. As a result, the *Radio Broadcast Preservation Act* ("RBPA") was added to the *2001 DC Appropriations Act*[7] which was enacted on December 21, 2000.[8]

3. *Section 632(a)(1)(A)* – This section of the RBPA would require the Commission to prescribe minimum distance separations for third-adjacent channels as well as co-channel, first-adjacent and second-adjacent channels. *(emphasis added)* This subsection of the law has been interpreted by the Commission that LPFM must use distance separation between LPFM and other facilities including full-service, FM translators and FM boosters as opposed to using the contour overlap model that used in the FM translator and full-service reserved band non-commercial FM service.[9]

4. *Other sections* – Other sections of the RBPA invalidated all licenses that did not meet the third-adjacent channel minimum distance separations[10] and ordered the Commission to conduct an "experimental program to test whether low power FM radio stations will result in harmful interference to existing FM stations if such stations are not subject to the minimum distance separations for third-adjacent channels".[11] The latter would lead to the MITRE study

[6] - See R&O at 78-80.

[7] - Pub L. No. 106-553, §632, 114 Stat. 2762, 2762-A-111 (2000). ("RBPA")

[8] - See also *Creation of a Low Power Radio Service,* Second Report and Order, 16 FCC Rcd 8026 (2001, "2nd R&O")

[9] - See *Creation of A Low Power Radio Service,* Second Order on Reconsideration, 20 FCC Rcd 6763 (2005, "Second Recon") at 34.

[10] - RBPA at (a)(3).

[11] - RBPA at (b).

which demonstrated that LPFM stations would not cause considerable interference to LPFM stations.[12] The RBPA also addressed LPFM ownership by individuals previously engaged in unlicensed operation in violation of Section 301 of the Communications Act.[13]

B. Local Community Radio Act

5. After a favorable outcome in the MITRE Report, legislation was attempted in 2005, 2007 and 2009 to pass the Local Community Radio Act. Finally in 2010, the Act was passed and became Public Law on January 4, 2011 as the *Local Community Radio Act of 2010* ("LCRA"). We will place emphasis on phrases within the paragraphs within the section to denote issues that we will be discussing in this pleading.[14]

1. Section 2: Amendment of the RBPA

6. Section 2 of the LCRA amends Section 632 of the Departments of Commerce, Justice, the State, the Judiciary, and Related Agencies Appropriations Act to require the Commission to "prescribe protection *(emphasis added)* for co-channels and first- and second-adjacent channels and to prohibit any applicant from obtaining a low-power FM license if the applicant has engaged in any manner in the unlicensed operation of a station in violation of §301 of the Communications Act (47 USC §301).[15] Section 2 also upholds the dismissal and cancellation of LPFM applications and permits that did not meet third-adjacent channel minimum spacing in accordance with the *Second Report and Order.*[16]

---

[12] - See *Federal Communications Commission, Comment Sought on the MITRE Corporation's Technical Report, Experimental measurements of the Third-Adjacent Channel Impacts of Low-Power FM Stations*, Public Notice, 18 FCC Rcd 14445 (2003).

[13] - RBPA at (a)(1)(b). Also see 47 U.S.C. §301.

[14] - We will only include sections of the LCRA that are relevant to this *Petition*. REC has a complete analysis and interpretation of the LCRA in REC Networks' *Comments* in MB Docket 17-105.

[15] - LCRA at 2(a).

[16] - See 2nd R&O.

2. Section 3: Minimum distance separations

7. Section 3(a) of the LCRA calls for the Commission to eliminate the third-adjacent channel minimum distance separation requirements between low-power FM stations and "full-service FM stations", FM translator stations and FM booster stations.[17]

8. Section 3(b)(1) states that the Commission cannot amend its rules to reduce the minimum co-channel and first- and second- adjacent channel distance separation requirements in effect on the date of enactment of this Act *(emphasis added)* between low-power FM stations and "full-service FM stations".

9. Section 3(b)(2) allowed for the Commission to use a waiver process in order to allow stations that would otherwise not meet the minimum distance separations for second adjacent channel stations if the applicant can make a showing that the proposed facility will not cause any interference to any second-adjacent channel radio service.[18] This section further outlines a process for the handling of any second-adjacent channel interference should a complaint arise.

3. Section 4: Radio reading services

10. Section 4 of the LCRA simply states that despite the elimination of the third-adjacent channel protections, those protections will still apply to full-service FM facilities operating on a third-adjacent channel that use a subsidiary communications authority (SCA) to carry a radio reading service for the blind and visually impaired.[19]

---

[17] - See *Creation of A Low Power Radio Service,* Fifth Report and Order, 27 FCC Rcd 3315 (2012, "5th R&O) at 11.

[18] - See *Creation of A Low Power Radio Service,* Sixth Report and Order, 27 FCC Rcd 15402 (2012, "6th R&O") at 72-79.

[19] - See 5th R&O at 12. We also note that in the *Reconsideration Order* (15 FCC Rcd 19208) at Appendix D, the Commission had published a list of "Existing Stations with Radio Reading Services". This list is the one that is recognized by REC as the stations eligible for third-adjacent channel protections. Over the

4. Section 5: Ensuring spectrum availability

11. Section 5 of the LCRA states that the Commission needs to assure that licenses are available for FM translator stations, FM booster stations and LPFM stations; decisions for licensing new stations are based on the needs of the local community and that FM translator stations, FM boosters and LPFM stations remain equal in status with each other and remain secondary to existing and modified full-service FM stations.

C. Interpretation of the LCRA

12. Like with any newly-passed legislation, the LCRA is subject to interpretation, especially considering that the law did not make true definitions to some terminology. In order to address improvements to the rules regarding LPFM, we need to interpret the law to determine definitions of certain terms that are not specifically defined in the law as well as not being defined directly in regulations and to apply those definitions towards new policy opportunities within the confines of the LCRA.

1. LCRA's amendment to the *2001 DC Appropriations Act*

13. Section 2 of the LCRA made an amendment to the *2001 DC Appropriations Act* in section 632(a)(1) where in the original language (from the RBPA) it required the Commission to modify the rules to:

> Prescribe minimum distance separations for third-adjacent channels (as well as for co-channels and first- and second-adjacent channels.[20]

---

years, we have witnessed application activity where the applicant has made a showing that the subject third-adjacent channel station no longer carries the reading service. In addition, there may be new stations carrying reading services that may be eligible for protection on future applications. REC feels that it would be in the public interest that a new list of stations is published in order to assure that stations carrying reading services are properly protected and that those are not can be reported as such in order to make third-adjacent channels potentially available for LPFM stations.

[20] - RBPA at §632(a)(1)(A).

The enactment of the LCRA amends section 632(a)(1) to read:

> Prescribe protection for co-channels and first- and second-adjacent channels.[21]

14. The LCRA would then discuss minimum distance separation requirements in Section 3(b)(1) where it states:

> In General- The Federal Communications Commission shall not amend its rules to reduce the minimum co-channel and first- and second-adjacent channel distance separation requirements in effect on the date of enactment of this Act between—
>
> (A) low-power FM stations; and
>
> (B) full-service FM stations.[22]

15. The RBPA specifically *prescribed minimum distance* separations.[23] This language can be interpreted that the only choice the Commission had was to use distance separation.[24] The RBPA language also did not specify which facilities were getting this protection. It could be assumed that it would include full-service, FM translators and FM boosters.

16. The LCRA modified the language in §632(a)(1) from *"prescribe minimum distance separations"* to *"prescribe protection"*.[25] The LCRA then clarified that the Commission was not to amend its rules to reduce distance separation between low-power FM stations and "full-service FM stations".[26] Further, the LCRA notes that the minimum distances

---

[21] - LCRA at §2.

[22] - LCRA at §3(b)(1).

[23] - RBPA at §632(a)(1)(A).

[24] - See 2nd Recon at 34.

[25] - LCRA at §2 (amending *2001 DC Appropriations Act* §632(a)(1)).

[26] - LCRA at §3(b)(1).

were those "in effect on the date of the enactment of [the LCRA]".[27] The LCRA became Public Law on January 4, 2011. At that time, §73.807 contained distance separation tables for both LP100 and LP10 services. The LP10 tables would not be removed from the rules until the *Sixth R&O*.[28] Therefore, for all intents and purposes, the LCRA does consider the LP10 table as being "in effect on the date of the enactment" and therefore it can be considered in rulemaking without conflicting with statute. In addition, the Commission has already acknowledged that the LCRA does not contain any language that would limit the power levels at which LPFM stations may be licensed.[29]

2. Definition of a "full-service FM" broadcast station

17. One distinction between the LCRA and the RBPA is the use of the term "full-service FM". While "full-service FM" is not specifically defined in the LCRA, we need to consider what facilities would be considered, in the eye of the LCRA, a "full-service FM" facility. In Section 3(a), the law calls for the Commission to modify the rules to eliminate third-adjacent minimum distance separation between low-power FM stations and full-service FM stations, FM translator stations and FM booster stations.[30] In Section 3(b), the LCRA mandates that the Commission does not reduce the minimum distance separation requirements in effect on the date of the enactment of the LCRA between low-power FM stations and full-service FM stations.[31] Further, in section 5, the LCRA states that licenses are available to FM translator stations, FM booster stations, and low-power FM stations[32] and that FM translator stations, FM booster stations and low-power FM stations remain equal in status and secondary to existing and

---

[27] - Id.

[28] - 6th R&O at 201-204.

[29] - 6th R&O at 206.

[30] - LCRA at §3(a).

[31] - LCRA at §3(b).

[32] - LCRA at §5(1).

modified full-service FM stations.[33] Based on the application of the LCRA's usage of the term "full-service FM" and the distinctions made between "full-service FM" and "FM translator" and "FM booster" stations, the LCRA can be interpreted that "full-service FM" consists of domestic full-power facilities (e.g. classes A, C3, C2, C1, C0, C, B and B1). It can also be defined to include Class-D (secondary) noncommercial educational FM stations as these stations are not FM translators, boosters or LPFM stations despite their secondary status. The term "full-service FM" does not include FM translators, FM booster or other LPFM stations.[34]

3. Protection to "full-service FM" and other facilities

18. Now that we have defined a "full-service FM" broadcast station, we need to look at what protections are statutorily required for each radio service under the LCRA. LCRA Section 3(b)(1) states that the FCC shall not amend the rules to reduce the minimum distance separation requirements low-power FM stations and full-service FM stations.[35] This means that no matter what, full-service FM stations, as we defined as full-power FM stations and Class D noncommercial educational stations are subject to a minimum distance separation requirement.

19. FM translators, FM boosters and low-power FM stations are not considered full-service FM stations. Since Section 3(b)(1) only applies to full-service FM stations and the blanket language in Section 2 removed the phrase "minimum distance separations", it can be interpreted that since the enactment of the LCRA, we are no longer under a statutory requirement to provide minimum *distance separation* to FM translator and FM booster stations, however under the surviving language in Section 2, the Commission must still "*prescribe protection*" for co-channels, first- and second adjacent channels but it does not specify distance separation as

[33] - LCRA at §5(3).

[34] - The term "full service" in reference to a full-power FM broadcast station is used in 47 C.F.R. §73.809(a) in respect to interference protection to subsequently authorized FM broadcast stations. ("If a full service commercial or NCE FM facility application is filed subsequent to the filing of of an LPFM station facility application, such full service station is protected against any condition of interference...") This term "full service" was amended to this rule in the *Third Report and Order* (22 FCC Rcd 21912).

[35] - LCRA §3(b)(1).

that protection method.[36] This opens the door for the Commission to consider the replacement of the minimum distance separation (mileage) between LPFM stations and FM translators with a contour overlap model.[37] Likewise, there is no statutory language to require that LPFM stations and channel 6 TV stations (including LPTV and class-A) be protected by minimum distance separation.[38]

III. PROPOSED CHANGES TO LPFM SERVICES

A. §73.807 minimum distance separations

1. Protections to full-service FM stations

20. *Create a second "regime" for protection to incumbent facilities* – REC is proposing to create two different regimes for which LPFM stations can be authorized under:

(1) §73.807 – This regime consists of the existing rules. All LPFM stations must meet minimum distance separation with all full-service, LPFM, Class D noncommercial education, FM translator and FM booster stations. Under the §73.807 regime, LPFM stations will be subject to the existing interference rules in §73.809 and protected in respect to full-service FM stations in §73.209.

(2) §73.815 – This regime uses a combination of a combination of the former LP10 distance separation table and contour overlap to demonstrate protection to full-service, LPFM, Class D noncommercial educational, FM translator and FM booster stations. Stations invoking §73.815 will have an additional layer of interference rules similar to §74.1204(f) and §74.1203(a) which apply to FM translators and do not receive the §73.209 "protection". This is the price

[36] - *2001 DC Appropriations Act* at §632(a)(1).

[37] - FM boosters are required to maintain their protected service contours entirely within the protected service contour of their primary station. Therefore, if an LPFM station is protecting a full-service contour to its protected contour, it is also protecting the booster in the same manner.

[38] - LPFM protections to TV channel 6 stations are defined in 47 C.F.R. §73.825.

that LPFM stations seeking more flexibility will need to pay. Otherwise, the "safety blanket" of §73.807 is still available for those proposals that can qualify.

The use of the §73.815 regime would be triggered in the following circumstances:

(1) The proposed facility does not meet §73.807 minimum distance separation requirements[39]; and/or

(2) The proposed facility specifies a 1 mV/m contour that exceeds an average of 5.6 kilometers. In other words, an LPFM station that exceeds 100 watts at 30 meters HAAT.

We are proposing to bring back intermediate frequency protections into the §73.815 Regime but only for LPFM stations where the actual ERP is 101 watts or greater. This is consistent with FM translators.[40]

21. *Recognition of "full-service FM" stations* – Based on our proposed interpretation of the language of the *DC Appropriations Act* as amended by the LCRA, the language in Section 3(b)(1) of the LCRA and our interpretation of the definition of a "full-service FM" broadcast facility based on the usage of the phrase throughout the LCRA, REC interprets the LCRA as stating that LPFM stations must utilize minimum distance separation between LPFM stations and full-power commercial and non-commercial (Class A, B, B1, C, C0, C1, C2 and C3) stations as well as between LPFM stations and Class D (secondary) non-commercial educational FM stations.

22. *The "LP10" distance charts were codified at the time LCRA became law* – REC also recognizes that the LCRA specifically states that the Commission shall not amend the minimum co-channel, and first- and second-adjacent channel separation requirements in effect on the date of enactment of [the LCRA] between low-power FM stations and full-power FM

[39] - LPFM stations in the §73.807 regime that are currently §73.807 short-spaced may remain in the §73.807 regime if the short-spacing is not being increased as long as all other requirements to remain in the §73.807 regime continue to apply.

[40] - FM Translators operating "less than 100" watts (albeit 99 watts) are not required to protect intermediate frequency. Likewise, we are also proposing to change the language of §74.1204(g) to "100 watts or less" to make FM translators consistent with LPFM thus promoting "equal in status".

stations.[41] REC also recognizes that the enactment date of the LCRA was on January 4, 2011 and that on that date, the Commission had codified what is now former §73.807(b) of the Commission's Rules, which defined minimum distance separation requirements between LP10 stations and full-service facilities.[42] In the *Fourth NPRM* when proposing a new LP250 class of service, the Commission recognized that the 20 kilometer "buffer zone" established in the *R&O* "provides more protection than the [power] increase".[43] Finally, in the *Sixth R&O*, the Commission recognized that "the LCRA does not any language limiting the power levels at which LPFM stations may be licensed."[44] Also in the *Sixth R&O*, in 2012, the Commission repealed the former §73.807(b), which removed the LP10 tables from federal regulations.[45]

23. *The Commission has statutory authority to reduce LPFM separations to "LP10" levels* – Based on our interpretations of the LCRA and past Commission statements in regards to the "buffer zone", the Commission's recognition that the LCRA does not contain language regarding operating power, the fact that the "LP10" distance separation tables were still codified on January 4, 2011 which was date of the enactment of the LCRA, the burden towards LPFM stations faced with displacement from encroaching stations to select channels that would otherwise be available to FM translators operating equivalent or superior facilities and in order to prepare for a growth of more original local community services in a future LPFM filing window which community need is being expressed for, REC is proposing that the Commission amend the rules to reduce the minimum distance separations of LPFM stations towards full-service FM stations on co-channel and first-adjacent channels to the minimum distance separations of the former §73.807(b), which was in effect on the date of the enactment of the LCRA.[46]

---

[41] - LCRA §3(b)(1).

[42] - MO&O at Appendix A; modification to §73.807(b).

[43] - 4th NPRM at Footnote 125.

[44] - 6th R&O at 206.

[45] - 6th R&O at 202.

[46] - Minimum distance separations between LPFM stations and full-service FM stations on second-adjacent channels (and for radio reading services, on third-adjacent channels) will remain at their current distances due to the fact that the Commission did not include a "buffer zone" with second and third-adjacent channel minimum separation. The minimum separation in these cases is computed by adding the

24. *Protections for co-channel full-service FM stations* –REC proposes that the Commission use the distance separation tables under §73.807(b)(1) as published in the *Code of Federal Regulations* ("CFR"), October 1, 2010 edition, the last issue that was published prior to the enactment of the LCRA.[47] Using that table, LPFM stations will continue to over-protect full service stations except Class B[48] through a buffer zone ranging from about 4 to 7 kilometers based on full-service FM station class. Our proposed minimum distance separations for co-channel stations are shown in the following table:

	Current minimum separations					Proposed minimum separations (250W)				
Class	FS service contour	LP interf. contour	Buffer Zone	Total Min. Req'd.	Codified	FS service contour	LP interf. contour	Buffer Zone	Total Min. Req'd.	Codified
A	28.30	18.58	20.00	66.87	67	28.30	23.76	6.94	59.00	**59**
C3	39.08	18.58	20.00	77.66	78	39.08	23.76	6.16	69.00	**69**
B1	44.74	22.41	20.00	87.14	87	44.74	28.51	3.75	77.00	**77**
C2	52.20	18.58	20.00	90.77	91	52.20	23.76	6.04	82.00	**82**
B	65.06	26.82	20.00	111.88	112	65.06	35.59	0.00	100.65	**99**
C1	72.31	18.58	20.00	110.88	111	72.31	23.76	6.93	103.00	**103**
C0	83.43	18.58	20.00	122.01	122	83.43	23.76	6.81	114.00	**114**
C	91.82	18.58	20.00	130.40	130	91.82	23.76	6.42	122.00	**122**

It is important to remember that the proposed minimum distance separations are predicated on the LPFM station's interfering contour not overlapping the full-service service contour.

---

interfering contour of the LPFM station with the protected service contour of the full-service FM facility. In addition, while we consider Class-D stations as eligible under statute for minimum distance separation, the Commission did not include a "buffer zone" in respect to Class-D stations. Therefore, we will not propose any reductions in distance between LPFM stations and Class-D FM stations.

[47] - 47 C.F.R. §73.807(b)(1) (2001).

[48] - In the original LP-10 rules, the Co-channel minimum distance separation from LPFM to a Class B station was codified at 99 kilometers. However, the sum of the standard 34 dBu interfering contour of an LPFM station operating 250 watts at 30 meters HAAT and the 54 dBu service contour of a Class B FM station exceeds the LP-10 distance. We will still propose a minimum distance of 99 kilometers for this relationship keeping in mind that the LP-10 minimum distances are only used in conjunction with contour overlap. Therefore, under the proposed §73.815 Regime, not only would an LPFM station need to be 99 km from a co-channel Class B station, it will also be required to have no overlap between the 34 dBu interfering contour of the LPFM station and the 54 dBu protected contour of the Class B station.

25. *Protections for first-adjacent channel full service FM stations* – For first-adjacent minimum separation, we also use §73.807(b) as it was published in the October 1, 2010 edition of the CFR.[49] Using these distances, which were in effect at the time the LCRA was enacted, LPFM stations on first-adjacent channels will continue to over-protect full-service FM stations with buffer zones ranging from 12 to 15 kilometers:

	Current minimum separations					Proposed minimum separations (250W)				
Class	FS service contour	LP interf. contour	Buffer Zone	Total Min. Req'd.	Codified	FS service contour	LP interf. contour	Buffer Zone	Total Min. Req'd.	Codified
A	28.30	7.99	20.00	56.28	56	28.30	10.15	14.55	53.00	**53**
C3	39.08	7.99	20.00	67.07	67	39.08	10.15	14.77	64.00	**64**
B1	44.74	9.59	20.00	74.33	74	44.74	11.98	13.28	70.00	**70**
C2	52.20	7.99	20.00	80.18	80	52.20	10.15	14.65	77.00	**77**
B	65.06	11.36	20.00	96.42	97	65.06	14.15	11.79	91.00	**91**
C1	72.31	7.99	20.00	100.29	100	72.31	10.15	14.54	97.00	**97**
C0	83.43	7.99	20.00	111.42	111	83.43	10.15	14.34	107.92	**108**[50]
C	91.82	7.99	20.00	119.81	120	91.82	10.15	14.03	116.00	**116**

26. *LPFM will still be subject to inward interference* – Even if the minimum distance separation requirements between LPFM stations and full-service FM facilities are reduced to the absolute statutory minimums as outlined above, this does bring LPFM stations further inside the interfering contours of full-service stations. LPFM stations will need to continue to research whether the prospective channel will be able to provide interference-free service to the proposed LPFM service area based on additional factors such as terrain that was not considered by the contours and by actual monitoring of the proposed channel within the LPFM service area. We also note that in the §73.815 Regime, full-service stations can object to proposed LPFM facilities in the same manner they can object to proposed FM translator facilities. By using the §73.815

[49] - Id.

[50] - In §73.807(b) as published in the October 1, 2010 edition of the CFR, the first-adjacent channel minimum separation to Class C0 was shown as 99 kilometers. This would have created a buffer zone of only 7.8 kilometers which would be inconsistent with the minimum distance separations for Class C1 and C stations. We believe this was an error that was never addressed as the Commission never had a filing window for new LP10 stations. Therefore, consistent with our proposed reductions for Classes C1 and C, we are proposing a minimum distance separation of 108 kilometers for Class C0 based on a buffer zone of 14.34 kilometers.

Regime, the LPFM applicant must understand that their application would carry this additional risk. If the LPFM station proposes to use the first (original) regime under §73.807(a), any interference is not actionable however the applicant would be limited to 100 watts at 30m HAAT.

27. *The §73.815 Regime option is in the public interest* – REC feels that this option will bring needed relief to LPFM stations by allowing them more flexibility to address the possibility of displacement as a result of application activity by full-service FM stations and FM translators that may be located in a manner that will cause interference to the LPFM station despite providing appropriate protections using contours. The FM environment has changed substantially since 2000 when LPFM has been created and since then, LPFM has proven itself as a "mature" service that is engineered by professionals. In fact, during the 2013 LPFM filing window, over 50 percent of the granted original construction permit applications were filed by only 20 different preparers including REC's Michelle Bradley who was the "tech box" signatory on 4% of all LPFM applications.[51] This change also removes some of the "over-simplification" of LPFM, brings LPFM towards a more level playing field with FM translators and most importantly, it is consistent with the LCRA and past Commission precedence and we feel that it is in the public interest to reduce the minimum distance separations to the absolute statutory minimums as proposed here.

2. Protections to FM translators, boosters and other LPFM stations

28. *Current rules: LPFM protecting translators and other LPFM stations* – §73.807(a) of the Commission's Rules requires LPFM stations to protect other LPFM stations on co-channel a minimum of 24 kilometers and on first-adjacent channel at a minimum of 14 kilometers. §73.807(c)(1) requires LPFM stations to protect FM translators on co-channel, first-adjacent and second-adjacent channels.[52] The amount of protection is fixed into three different tiers based on the size of the translator's service contour using the 8-radial height above average

[51] - Michelle Bradley's name appeared on the tech boxes of 3.9% of all granted construction permit applications filed in the 2013 window. Danny Langston had the most at 6.1% and Leo Ashcraft had 5.7%.

[52] - 47 C.F.R. §73.807(c)(1).

terrain (HAAT) method. The distance separation method does not take into consideration if whether the FM translator is operating a directional antenna.

29. *Current rules: FM translators protecting LPFM stations* - §74.1204(a)(4) of the Commission's Rules state that an FM translator must protect a LPFM on co-channel and first-adjacent channels only.[53] Translators are not required to protect an LPFM on a second-adjacent channel. Protection is achieved through the use of contour overlap. The interfering contour of the proposed translator facility cannot overlap the protected contour of the LPFM. FM translators can use variable power levels and directional antennas to demonstrate protection.

30. *Burdens facing LPFM stations since AM Revitalization* – Over the past year, REC has received many complaints from LPFM licensees that are in a situation where they are receiving interference from an FM translator that has "hugged" their station by placing an interfering contour around at least half of the LPFM's protected contour. The other situation that we are experiencing are FM translators that are using very directional antennas such as the Scala CL-FM in order to reach a certain area and the LPFM is far outside of the beamwidth of the antenna however due to the LPFM distance spacing rules, the LPFM station is short-spaced to the translator which prohibits the LPFM station from moving closer to the translator even if the new location would result in no contour overlap to the translator. Because of the existing distance spacing rules in respect to translators, the use of the 20 kilometer buffer zones towards full-service stations and a slow redress process under §74.1203(a), LPFM stations are deadlocked in their current situations that are putting their viability at risk in favor of subsequently authorized *secondary and supposedly equal-in-status* translators. Under the current rules related to LPFM, they only have two choices, put up or shut down.

31. *Contour overlap with some services is permitted under the LCRA* – When the RBPA was in effect, Section 632(a)(1) of the *2001 DC Appropriations Act* stated that the Commission was to "prescribe minimum distance separations". In Section 2 of the LCRA, the Section 632(a)(1) language was changed to only "prescribe protection" and then in Section 3 of

[53] - 47 C.F.R. §74.1204(a)(4).

the LCRA, language was added to specify distance separation, but only in respect to full-service FM stations. As we had previously stated, the term "full-service FM" does not include FM translators and FM boosters as those are called out separately in various parts of the LCRA. While it was true that after the enactment of the RBPA and prior to the enactment of the LCRA, the Commission was statutorily required to use distance separation in the protection of FM translators and LPFM stations, that requirement was repealed in the LCRA in respect to FM translators and LPFM stations but remained in place for full-service stations.

32. *REC's proposed rule change* – REC proposes to keep a distance separation table between LPFM stations and FM translators in §73.807 under the current values, however we will offer an alternative method of protecting translators under the §73.815 Regime. For proposals specifying §73.815 Regime protections, LPFM stations may "short-space" the translator, booster or LPFM station as long as there is no contour overlap on co-channel and first-adjacent channels. Second-adjacent channel is handled by the current rule in §73.807. LPFM stations choosing to invoke the §73.815 Regime to "short-space" an FM translator, FM booster or other LPFM station would be subject to interference resolution rules similar to §74.1204(f) and §74.1203(a). From a protection and interference standpoint, this will bring LPFM and FM translators "equal" in the spirit of Section 5 of the LCRA. [54] §73.816 would be amended to allow for the use of directional antennas by LPFM stations for the purpose of protecting full-service FM, FM translators and other LPFM stations under the §73.815 regime.

3. LPFM stations within 125 kilometers of Mexico

33. In the international agreement between the United States and Mexico, low-power secondary stations within 125 kilometers of the common border with Mexico are limited to 50 watts ERP, a service contour of 8.7 kilometers and a 34 dBu interfering contour not exceeding 32

[54] - While FM translators are currently not required to protect LPFM stations on second-adjacent channels, REC interprets the remaining language in Section 632(a)(1) *2010 DC Appropriations Act* to still require some form of second-adjacent channel protection. ("Prescribe protection for co-channels and first- and *second-adjacent* channels.") To move LPFM to a more level playing field with translators, we should consider a second-adjacent channel protection requirement from translators to LPFM. That concept is not in the scope of this *Petition* and we are not proposing it.

kilometers in the direction of Mexico.[55] As a result, LPFM stations, which are currently non-directional in nature, are limited to 50 watts in all directions, including those headings that are not within 125 kilometers of Mexico.[56] LPFM stations in northern San Diego County California, Tucson Arizona and other communities that are not right on the border are having to substantially limit their coverage to many parts of their community compared to an LPFM station further north, such as in Phoenix which is permitted to operate at a full 100 watts. The Audio Division routinely grants FM translators to operate at ERPs in excess of 50 watts using directional antennas which keep the ERP to 50 watts or less along the radials that are within 125 kilometers with Mexico.

34. Because of the burden that this is placing on LPFM stations in areas within 125 km of the border but not right on the border, REC is asking the Commission to first amend §73.807 to codify the existence of the 50 watt limit but to also provide a provision in §73.807 and §73.816 to allow LPFM stations within 125 kilometers of Mexico to utilize directional antennas to operate in excess of 50 watts ERP along radials that are not within 125 km of the common border of Mexico. REC does feel that this is in the public interest as it will improve LPFM service in places like Tucson and San Diego as well as other communities near the border.

B. §73.816: Directional antennas

1. Use of composite antenna patterns

35. Directional antennas were introduced to the LPFM service in the *MO&O on Reconsideration* in 2000. They were requested by New York State Thruway Authority as a solution for licensees who planned to operate LPFM stations as travelers information services (TIS) to be able to direct the signal in a specific direction with high gain antennas resulting in

[55] - See *Agreement Between the Government of the United States of America and the Government of the United Mexican States Relating to the FM Broadcasting Service in the Band 88~108 MHz.* at Annex 1; 2.1.2 and 2.1.3.

[56] - See R&O at footnote 124.

lower transmitter power outputs.[57] The Commission permitted the use of directional antennas in LPFM but restricted their use to public safety entities operating as a TIS.[58] At that time, the Commission restricted directional antennas to "off-the-shelf" models as opposed to allowing for composite patterns stating that the latter can be exceedingly complicated.[59] The use of directional antennas was expanded in the *Sixth R&O* with the implementation of rules related to second-adjacent channel waivers.[60] Without offering any discussion on the issue, the Commission kept LPFM limited to "off-the-shelf" directional antennas, even for second adjacent channel short spaced stations.[61]

36. When directional antennas were limited to TIS stations, it was understandable to keep with simple "off-the-shelf" designs. However with the expansion of directional antenna use in the *Sixth R&O,* the Commission also cautioned "LPFM applicants against using this technical flexibility to limit the already small service areas of LPFM stations to such an extent that, while their LPFM applications are grantable, the LPFM stations will not be viable."[62] Most of the so-called "off-the-shelf" directional antennas, mainly the Katherin Scala (SCA) antennas which the FCC approves for LPFM stations are of very narrow beamwidth and therefore would very much limit the population served when used in the "off-the-shelf" configuration regardless of how it is rotated. For example, let's say we have a hypothetical LPFM station located in Panorama City, California.[63] This station is operating 100 watts with a about a 50 foot radiation center. If that station operates on a non-directional antenna, it will serve a population of 467,478 with a service

[57] - See *Creation of a Low Power Radio Service,* Memorandum Opinion & Order on Reconsideration, 15 FCC Rcd 19208 (2000, "Recon Order") at 46.

[58] - Id. at 49.

[59] - Id. at 50 and footnote 53.

[60] - 6th R&O at 79.

[61] - Id.

[62] - 6th R&O at 80.

[63] - Located at NAD27 34-13-34.3 NL, 118-26-45.9 WL. Radiation center 15 meters above ground level, 265 meters radiation center altitude mean sea level, minus 84 height above average terrain and operating 100 watts ERP.

area of 42.107 square miles. Now, let's say what we need to protect a single residence and we have to place a directional antenna at 315 degrees towards Mission Hills and Granada Hills. The following chart shows the population served by some of the various "off-the-shelf" antennas:

Antenna (CDBS pattern ID#)	Population in 60dBu	% of non-directional	Square miles	% of non-directional
Non-directional	467,478	100.0 %	42.107	100.0 %
Scala CA-2 horizontal (16129)	171,916	36.7 %	14.646	34.8 %
Scala CA-2 vertical (16130)	165,256	35.4 %	14.198	33.7 %
Scala CA-2 circular (16125)	166,191	35.6 %	14.267	33.9 %
Scala CA5-150 horizontal (16146)	149,279	31.9 %	11.737	27.9 %
Scala CA5-150 vertical (16147)	172,932	37.0 %	14.076	33.4 %
Scala CA-5-CP-RM circular (16149)	166,913	35.7 %	13.303	31.6 %
Scala CL-FM horizontal (16150)	121,164	25.9 %	8.724	20.7 %
Scala CL-FM vertical (16151)	142,856	30.6 %	11.408	27.1 %

As shown in this chart, by limiting directional antennas to "off-the-shelf" designs, the Commission is limiting LPFM stations to only about one-third of its potential. At the same hypothetical facility, we will take two Scala CA-5-CP-RM circular polarized antennas, place them in a skewed configuration with antennas rotated at 240 and 315. That configuration has just grown our coverage from 166,913 (35.7%) to 254,746 (54.5%) persons.

37. REC is aware of at least one LPFM station where a skewed antenna was proposed and was granted by the Commission. The directional antenna was necessary in order to prevent interference to a single residential structure. The proposed area is in a mountainous area with homes in the mountains but also overlooking a community at a lower elevation. Two Scala CA2-FM/CP antennas were used in a skewed array at 202 and 298 degrees. In this case, if the applicant could operate non-directional, they would reach 11,410 persons. With the authorized and built directional antenna, the station is reaching 8,760 persons or nearly 77 percent of their potential audience while still protecting a single residential structure.

38. If designed correctly, the use of a skewed array can properly do the job of protecting the short-spaced second adjacent channel station while serving as many people as possible. The initial reconsideration request to use directional antennas was filed prior to the first ever LPFM filing window opportunity. This was before we knew who was going to be filing for LPFM stations and the skill sets of those applicants and any hired help. Also during

that period of time, CDBS was new and electronic filing was a brand new thing. It would be understood why there would be resistance to allow for anything other than simple. But as we saw in the 2003 Auction 83 and the 2007 NCE filing windows, CDBS and the Commission's own FM Study program were ready to meet the challenges of every directional antenna design under the sun.

39. In the 2013 window, LPFM proved itself to be a mature service and applicants did have the resources to use "hired help", such as REC for assistance with their applications. Of the three top "tech box" certifiers in this past window, one is a respected name in the full-power and translator business, one has left the business and one is the author of these comments. With that, I can say with authority that the flexibility of using composite directional antennas in the LPFM service will not necessarily be a burden on applicants or preparers at the application phase. REC does agree that there will be some LPFMs that will not be able to afford a directional antenna array but for those that can, they should be afforded that flexibility.

40. Because of the maturity of LPFM over the past 17 years and given that a majority of LPFM applications are being filed by "hired help", many with experience with directional antennas, REC feels that any restrictions on composite antennas as suggested in the *Sixth R&O* is outdated and burdensome and therefore unnecessary. We do note that while the *Sixth R&O* does require "off-the-shelf" antennas even for second-adjacent channel waivers, it is not necessarily codified that way. REC is currently not aware of any LPFM station using a directional antenna for a TIS. However, based on what we are going to propose for directional antennas, we will propose to keep this language in the rule, but without restriction on composite antennas.

2. Use of directional antennas in LPFM

41. As already mentioned, §73.816(b) prohibits directional antennas in the LPFM service but carves-out two exceptions for TIS and for second-adjacent channel waivers.[64]

[64] - 47 C.F.R. §73.816(c)

Consistent with what REC has already proposed in these comments, we feel that it would be appropriate to extend the scope of directional antennas to include other reasons including:

- In order to use contour overlap an association with the applications specifying §73.815 Regime protections;
- In order to use contour overlap to protect other LPFM stations;
- In order to use contour overlap to protect channel 6 TV facilities and
- In order to comply with international agreements.

42. REC feels that the public interest dictates that LPFM stations be permitted as equal of a playing field as possible with FM translators. As a service equal in status and licensed based on community need, we feel that this flexibility will give existing and new LPFM stations the ability to best serve their local communities while preventing interference to other stations. We do note that while most LPFM stations will likely be non-directional, these directional options need to be there for those who need them.

C. §73.825: Protection to reception of TV channel 6

43. LPFM stations proposing operation on the reserved band channels 201 through 220 must also protect TV, LPTV, Class A and TV translator stations operating on Channel 6, which is the spectrum directly adjacent to the FM broadcast band at 82 to 88 MHz. In the *R&O*, the Commission citing the need for applicants to conduct "complex calculations" and detailed contour studies and to prevent placing a burden on applicants used minimum distance separation tables utilizing worse-case scenarios for TV stations.[65] In the *Reconsideration Order*, the Commission added a separate distance table for LPTV stations.[66] Calculations of the minimum distances to Channel 6 TV stations is based on a standard 47 dBu F(50, 50) service contour (also known in analog TV as the "Grade B" contour) and a F(50, 10) interfering contour for the FM facility that ranges from 54 dBu for channel 201 to 90 dBu for channel 220. In LPFM, the minimum distance separation is determined by adding the TV station's protected contour with

[65] - R&O at 114.

[66] - Recon. Order at 42.

the LPFM station interfering contour. LPFM stations on channels 221 to 300 (92.1~107.9) are not required to protect TV channel 6.

44. In the *Reconsideration Order*, the Commission clarified that the "worse-case" facilities used for determining the distance separation are based on full-power TV facilities operating at 100 kW ERP at 610 meters HAAT and LPTV facilities operating at 3 kW ERP at 610 meters HAAT. Like with the protection of FM translators, the minimum distance separation does not take into consideration low-power TV facilities that operate directional antennas. In addition, the rules for LPFM, FM translators and full-service NCE FM stations are based on the analog television service. No new standards have ever been developed. In fact, National Public Radio (NPR) has filed a *Petition for Rulemaking* to eliminate the channel 6 protection requirements, a move staunchly opposed by the NAB and the Association for Maximum Service Television, Inc. (MSTV)[67]

45. While REC supports the complete repeal of §73.525 as well as companion rules §73.825 and §74.1205, LPFM stations need immediate relief from the over-restrictive channel 6 protection rules specific to LPFM that reduce the availability of channels for LPFM stations, especially those facing displacement due to incoming interference. As mentioned, the Commission considers all LPTV stations as non-directional facilities operating with 3 kW ERP to 610 meters HAAT thus creating a 47 dBu protected contour of 87 kilometers. This means that no matter if the LPTV station is 3 watts or 3,000 watts, it is given a blanket service contour of 87 kilometers. REC has performed an analysis on the 47 dBu protected contours of the remaining LPTV channel 6 TV stations (analog and digital) and we have calculated their actual service contour distances based on ERP and HAAT:

47 dBu service contour size	**LPTV facilities**	**% of facilities**
Between 0~10 kilometers	12	9.2 %
Between 10~20 kilometers	21	16.2 %
Between 20~30 kilometers	39	30.0 %
Between 30~40 kilometers	19	14.6 %
Between 40~50 kilometers	8	6.2 %

[67] - See *Petition for Rulemaking of National Public Radio to Repeal Section 73.525 of the Commission's Rules*, RM-11579.

Between 50~60 kilometers	15	11.5 %
Between 70~80 kilometers	6	4.6 %
Between 80~87 kilometers	4	3.1 %
87 kilometers or greater	6	4.6 %
Total facilities	130	100.0 %

As this chart shows, out of the 130 low-power television facilities that still operate on TV channel 6, only 10 stations (7.6 %) have service contours that exceed 80 kilometers. A majority of low-power facilities have service contours of 30 kilometers or less. In other words, we are overprotecting LPTV channel 6 stations by over 3 times their protected contour sizes while FM translators can use contour overlap and other options to use reserved band channels.

46. REC is proposing that the Commission amend §73.825 in order to replicate similar rules as in §74.1205. Specifically, we would keep the current minimum distance separation charts in §73.825 however, we propose to add a process where if a proposal is "short-spaced" to a TV channel 6 station using the "worse-case" distance separation charts, the applicant can use contour overlap in order to demonstrate that the LPFM station will not cause interference to the TV channel 6 station. Like with FM translators, LPFM stations should also have the option of reaching an agreement with the affected channel 6 licensee or permittee.[68] Like with FM translators, many of those who prepare LPFM applications including those 20 who represent more than 50 percent of the applications in the 2013 LPFM filing window (including Michelle Bradley from REC) are equipped to conduct contour studies if LPFM stations were able to use §74.1205-style contour overlap studies to propose reserved-band LPFM facilities. For those reasons, REC considers §73.825 as a burdensome rule and feels that the rule should be either repealed or amended to allow for contour overlap studies or consent of the channel 6 licensee or permittee. [69]

[68] - See 47 C.F.R. §74.1205.

[69] - REC also evaluated the future availability of channel 6 for use by full-service stations as a result of the Incentive Auction. Prior to the auction, there were 8 full service TV stations on channel 6 in Alabama, Georgia (2), Kansas, Montana, Nebraska, New York and Pennsylvania. As a result of the auction, only 2 TV stations in Ohio and Pennsylvania have been reallocated on channel 6 and the incumbent 8 stations remain. REC does not feel that the repack will have any impact that would prevent any consideration of the repeal or amendment of §73.825. If anything, it further demonstrates that Channel 6 can be cleared for future expansion of the FM broadcast band for use by AM licensees and community-based LPFM stations by creating 30 analog channels from 82.1~87.9 MHz. See *Technical Parameters for Post-*

D. §73.860: FM translators owned by LPFM stations

47. In the *Sixth R&O,* the Commission opened the door to allow LPFM stations to own and operate FM translators to allow broadcasters to improve service to oddly-shaped communities and to rural communities.[70] In doing so, the Commission placed several limitations on the FM cross-ownership of translators:

- LPFM stations were limited to two translators except for tribal nations which can own up to four translators,
- The 60 dBu contours of the commonly-owned LPFM station and translator overlap,
- The FM translator rebroadcasts at all time the main analog or HD-1 stream of the LPFM station,
- The FM translator receives the primary LPFM station directly over the air, and
- The FM translator must be located within 20 miles of the LPFM station (10 miles in markets 1~50).[71]

48. In 2017, based on a waiver request filed by REC on behalf of two LPFM stations with substantial terrain challenges, the Commission waived §73.860(b)(3) related to over-the-air reception and §73.860(a) to permit the cross-ownership of a FM booster that would be used as one of the LPFM station's two permitted "translators".[72] REC feels that LPFM stations have some unique aspects to them and translators provide a unique opportunity to extend their reach while maintaining an overall hyperlocal nature. We would like to address a couple of rules that, based on the development of the LPFM service and the issues in the aftermath of Auction 83, we

---

Auction Table of Allotments also *Incentive Auction Closing and Channel Reassignment Public Notice; Incentive Auction Closes; Reverse Auction and Forward Auction Results Announced; Final Television Channel Assignments Announced; Post-Auction Deadlines Announced,* Public Notice, 32 FCC Rcd 2786 (2017).

[70] - 6th R&O at 141-142.

[71] - 47 C.F.R. §73.860(b) and (c).

[72] - See *Strategic International Ministries,* BNPFTB-20150521ACF ("Strategic", Granted, June 22, 2017) and *Laguna Radio, Inc.*, BNPFTB-20160421AFL ("Laguna", Granted, June 22, 2017).

feel are now burdensome and now unnecessary in order to allow LPFM stations to create a unique service custom-tailored to their community.

1. Contour overlap and over-the-air reception

49. In the *Sixth R&O*, citing concerns about "leapfrogging" into unconnected, distant communities; the Commission set specific restrictions that would require FM translators commonly-owned by LPFM stations to have a service contour that overlaps in some way with the primary station and that commonly-owned FM translators must receive the primary signal over the air as opposed to microwave or internet protocol delivery.[73] This was at a time when concerns about the activities of the FM translators obtained in the Auction 83 filing window as well as concerns about *satellators* were very fresh. Some feared that commonly-owned LPFM translators would be used for purposes other than rebroadcasting the local LPFM station and that translators could be "trafficked" for profit. While the issues with satellators is still valid today as it always has been, REC feels that there are redundant rules on commonly-owned FM translators and that with the repeal of some of these restrictions, the surviving rules could continue to assure localism while providing LPFM stations with unique solutions to meet their local community needs.

50. *Contour overlap requirement* - §73.860(b)(1) requires that the 60 dBu contours of the commonly-owned LPFM station and FM translator overlap.[74] While this rule was well-intended to assure that LPFM translators cannot extend out too far thus jeopardizing the hyperlocal nature of the service, the contour requirement does provide challenges for LPFM stations, especially those in rural areas. Unlike LPFM for the past 17 years, FM translators can be authorized as directional or non-directional facilities and in some areas, operating a directional facility is the only option. This rule can be burdensome to an LPFM station that wants to provide service to a different part of town or to a rural community within the same

[73] - *6th R&O* at 142.

[74] - 47 C.F.R. §73.860(b)(1).

county but because the contours do not touch, the translator is not possible thus denying community radio service to that additional area.

51. *Over-the-air reception* - §73.860(b)(3) requires commonly-owned FM translators to receive the primary LPFM station over the air and without the assistance of another translator.[75] This rule is a direct result of the concerns over *satellators* and the potential that a commonly-owned FM translator will take programming directly off of a satellite and rebroadcast it instead of rebroadcasting the primary LPFM station. Because of the noise floor on FM, especially in light of the ongoing increase in FM translators and due to the eventual ability for LPFM stations to operate with directional facilities, we feel that with other surviving restrictive rules, will help control how far an LPFM station can be heard through a translator.

52. Existing rules that can manage LPFM translator localism – REC feels that even with the repeal of rules addressing contour overlap of the primary station and over-the-air reception of the primary station, the hyperlocal nature of LPFM can be maintained by the surviving rules in §73.860(b). Specifically, commonly-owned LPFM stations will still be required to rebroadcast their primary analog or HD-1 digital signal. This will assure that LPFMs are using the translator to expand their current programming and not using the translator to rebroadcast an unrelated service. We propose to still require a commonly-owned FM translator to be located within 20 miles of the LPFM primary station (10 miles in markets 1~50). These surviving rules will address the satellator concerns as it will still require a commonly owned translator to broadcast the commonly-owned LPFM programming. In addition, with the 20 or 10 mile restriction on placement of the translator, LPFM stations will not, themselves become satellators thus diminishing the hyperlocal nature of the LPFM service. Since commonly-owned FM translators will continue to be rightfully reigned-in through distance and primary station requirements, we feel that it is safe to remove the redundant and now unnecessary restrictions regarding contour overlap and program delivery and will allow LPFM stations more flexibility to custom tailor hyperlocal community radio to their area's geographic requirements.

[75] - 47 C.F.R. §73.860(b)(3).

2. FM boosters for LPFM

53. In the Sixth R&O, the Commission declined to authorize boosters for LPFM stations citing that there would be very few situations where an LPFM station could operate one without causing interference to its own primary signal.[76] While REC was able to successfully get rule waivers for two stations, we do agree that in most, but not all cases would an FM booster would not be beneficial to an LPFM station. In *Strategic*, we had a situation where an LPFM station was situated in a foothill area with terrain so unique that there were areas between 2 and 10 miles to the east that were also of lower elevation terrain. This created a very unusually-shaped protected service contour. The booster helped fill in that area, that was otherwise being reserved for them through contour protection but was blocked due to terrain. In *Laguna*, we had a rare case of a textbook low-level LPFM station with a perfect 5.6 kilometer protected contour had a portion of that contour cut off by terrain thus resulting in a complete cut out of the signal. Utilizing a directional antenna and taking advantage of being able to place a signal over the ocean beyond the service contour, we managed to propose to help fill-in their coverage along a portion of one of America's most famous highways.

54. While REC is aware of a small number of other candidates for boosters, we are concerned that boosters may be attempted where either cause interference to co-channel and first-adjacent channel stations, second or third-adjacent channel stations as well as interference to the primary station. Unlike full-service FM stations, LPFM stations can very easily overlap its protected contour inside the interfering contour of another station. Because of this flexibility, this makes the current FM booster rules non-applicable for boosters operated for LPFM stations. Since the grants of *Strategic* and *Laguna*, REC has received several inquiries about FM boosters for LPFM stations. In most of the cases, it would not be viable as there were few areas within the primary service contours that received a weak signal (45 dB or less) where an FM booster can be legally placed and remain within the 60 dBu contour of the primary station.

[76] - 6th R&O at footnote 333.

55. In response to the inquiries, REC has published a fact sheet which includes some of the various technical aspects that REC looked at as part of the *Strategic* and *Laguna* waiver requests. These guidelines include:

- The protected contour of the proposed booster is fully inside the protected service contour of the primary LPFM station and an ERP of no more than 50 watts is proposed.
- The LPFM facility that the booster will be based on is licensed (and not under an unbuilt construction permit).
- In markets 1~50, the proposed FM booster location is within 10 miles of the LPFM station.
- The booster must run on the same channel as the primary station and carry the same exact programming as the primary station.
- The LPFM station must currently meet §73.807(a) to all full-service stations on co-channel and first-adjacent channels.
- The (40/37/34 dBu) interfering contour of the booster can not overlap the (60/57/54 dBu) protected contour of co-channel full-power, class-D, FM translators and LPFM stations.
- The (54/51/48 dBu) interfering contour of the booster can not overlap the (60/57/54 dBu) protected contour of first-adjacent full-power, class-D, FM translators and LPFM stations.
- If the (60/57/54 dBu) protected contour of a second or third-adjacent channel full-power, class-D or FM translator overlaps the (100/97/94 dBu) interfering contour of the proposed booster, than a showing must be made that the resulting interfering contour based on a 40 dBu U/D ratio will assure that the interfering contour from the booster will not reach any occupied structure or four lane highway.
- In the reserved band, the 47 dBu protected service contour of a channel 6 TV, LPTV, Class-A or TV translator does not overlap the appropriate interfering contour of the FM channel (see §74.1205(c)(3)).
- Facilities near Canada and Mexico will have additional issues related to their appropraite international agreements.

The guidelines shown very much mirror the rules relating to FM translators. As REC stated in the waiver requests, a booster is much like a translator except that it uses the same channel. In this proceeding, REC does propose that certain aspects of the FM translator rules, such as §74.1204(a) be amended to allow FM boosters for LPFM to be required to meet various FM

translator engineering rules. The bottom line is that these requests should be rare but for those LPFM stations that can benefit, like *Strategic* and *Laguna*, we need this method in place.

E. §73.865: Assignments and transfers

1. Overview

56. *History of assignments and transfers in LPFM* - During the comment periods that lead to the original NPRM, it was recommended by some community radio advocates that LPFM construction permits not be transferrable to another party. That was recommended in context with a 12-month proposed construction period.[77] The Commission would eventually determine that LPFM licenses would not be transferrable in order to assure that spectrum is available for low power operations without the delay associated with license speculation.[78] In 2007, the Commission would eventually amend the rules to permit the non-profit assignment of LPFM licenses after a three-year holding period with a prohibition remaining on the assignment of construction permits.[79] The three-year holding period was recommended by Prometheus Radio Project to prevent the trafficking of permits and licenses similar to the excessive trafficking of construction permits that was taking place with the granted singleton applications for the 2003 Auction 83 FM translator window.[80]

57. *A desire to help "save the station"* - Following the 2013 LPFM filing window, REC received many inquiries from LPFM permittees that were not able to construct and from other organizations who were in a position to construct a station. They wanted to know if a different organization can "take over" a construction permit in order to "save the station". §73.865 of the Commission's Rules prohibits an assignment of a construction permit and a

[77] - NPRM at 79.

[78] - R&O at 163.

[79] - 3rd R&O at 16-17.

[80] - Id. at 17.

license that has been granted for less than three years.[81] Following the 2013 LPFM window, four applications were filed to request an assignment of a construction permit and an additional three assignments of license were filed by LPFM stations from the 2013 window.[82] In the case of *San Marcos Voice*, the request to assign the permit stemmed from a legal dispute internally within the organization and the assignment was requested in order to prevent the San Marcos community from losing this "vital opportunity" and that its loss would "certainly go against the overall public interest, rather than to serve the public interest".[83]

58. *Assuring that LPFM licenses are not "sold"* - When the Commission permitted the assignment of LPFM licenses after a 3-year holding period, it stated that "the for-profit sale of LPFM authorizations to any buyer is fundamentally inconsistent with the Commission's desire to promote local, community based use and ownership of LPFM stations".[84] REC feels that this statement is still applicable to the service and we continue to support the Commission's position on this. We are concerned though that in *HGN Music,* that the schedule of terms in the Asset Purchase Agreement was redacted citing *LUJ Inc.*[85] In *LUJ Inc.*, the Commission found that "an applicant's failure to submit [certain] documents is neither a material omission [...] nor grounds for a finding that the transaction is not in the public interest".[86] However, the Commission did clarify in a footnote that examples of such immaterial documents includes employee benefit plans and vendor supply contracts.[87] As LPFM assignments are non-profit in nature and that any

[81] - See 47 C.F.R. §73.865(c) and (d).

[82] - See *City of Morro Bay,* BALL-20161011ABL (dismissed November 29, 2016); *HGN Music & Education Foundation,* BALL-20160930AII (dismissed December 13, 2016, "HGN Music"); *Wolfe Communications,* BALL-20160520ABD (dismissed July 7, 2016); *Olympia All Ages Project,* BAPL-20170123FLG (dismissed February 7, 2017); *Mitchell County Public Radio, LLC,* BAPL-20150723ABN (dismissed August 4, 2015) and *San Marcos Voice,* BAPL-20150209ABL (dismissed March 2, 2015, "San Marcos 1") and BAPL-20150330AFW (dismissed October 8, 2015, "San Marcos 2").

[83] - See *San Marcos 2* at Exhibit 1.

[84] - 3rd R&O at 15.

[85] - See *HGN Music* at Exhibit 5.

[86] - See *LUJ, Inc.*, Memorandum Report and Order, 17 FCC Rcd 16980 ("LUJ Inc.", 2002) at 7.

[87] - Id. at footnote 12.

consideration promised or received may not exceed the depreciated fair market value of the equipment and facilities[88], it is in the public interest to assure that any consideration must be itemized and certified in the application process.

59. *Assignment rules must evolve for a mature service* - Like with other LPFM rules, we have evolved from the Bill Kennard days of a simple, easy to construct LPFM service to the complex broadcast service that it is today. When LPFM went from "infancy" to "childhood", the Commission realized that there truly was a need to allow LPFM stations to assign their licenses and they decided to proceed with caution, especially given the active situation that was taking place in the FM translator service with the aftermath of Auction 83. The realities of what happened in aftermath of the 2013 window has demonstrated that LPFM is now past its childhood and has reached maturity. With that, we need to treat LPFM like a mature broadcast service, but at the same time, we still need to keep our guard up. With that, the current rules are burdensome because they do not permit an LPFM station to be saved and does not permit another organization to continue a service if the previous organization must abandon it in the first three years. The ownership rules partially protect the service from speculation and other bad actors. With that, we are asking the Commission to amend §73.865 to reflect the reality of today.

2. Assignments of licensed (on the air) LPFM stations

60. REC feels that LPFM has matured and based on real-world situations, the current rules for assignments and transfers are outdated and still thrive on the Kennard-era desires of simplicity and in the wake of a real concern in the mid-2000s. For constructed stations that are fully licensed, REC is proposing to eliminate the 3-year holding period. Stations that are constructed and on the air have already made a significant investment in their community through the construction of the station. The ability to assign a license within the first three years can address issues where one organization is no longer able or willing to operate the station but there is another qualified non-profit organization waiting in the wings that is willing to provide a community radio service perhaps similar to *Morro Bay*.

[88] - See 47 C.F.R. §73.865(a)(1).

61. With that, we must keep the rules that assure that LPFM licenses will be assigned without any promised or actual consideration above and beyond the depreciated fair market value of any tangible goods that are a part of the transaction and we must positively codify a requirement of a schedule of tangible goods with a fair market value for each line item as a part of the assignment application in order to prevent confusion through the dependence on *LUJ, Inc.*

62. In order to further assure that the rules are not circumvented by "weaker" organizations by using "stronger" organizations to get them a license, we are proposing for stations licensed for less than 4 years, that if an original construction permit was awarded based on the process handling of mutually exclusive applications, the assignee organization must meet or exceed the same point value as the assignor.[89] If the MX group reached a tie-breaker, then the assignee must have a community presence date that is the same or older than the youngest granted station in the group.[90] This will prevent anyone from "cutting in line".[91]

3. Assignments of "failing" construction permits

63. REC supports efforts to save stations. We must acknowledge that some LPFM stations may not be able to finish construction but there may be another equally-qualified organization that could. We feel that we should allow the originally granted applicant to have an opportunity to construct the station but if it is determined that the effort is failing, then, the grantee should be able to transfer. We are proposing an 18-month holding period on the assignment of original construction permits. Organizations that are still not able to construct after 18 months would be permitted to assign their permit to another organization. The new organization must meet all of the LPFM qualifications and like proposed by REC for assignments of licenses, we would also require that any construction permit that was granted as a result of a point evaluation under §73.872(b), can only be assigned to another organization that

[89] - See 47 C.F.R. §73.872(b).

[90] - See 47 C.F.R. §73.872(d)(3).

[91] - For example, there were 4 members of the original MX group, all equally qualified. Their local presence dates were in 1965, 1974, 1983 and 1992. No timeshare proposals involving

would meet or exceed the number of points that are held by the assignor and if a tie was originally declared in the MX group, then the assignee's local presence date must meet or be older than the assignor. We feel that this is a reasonable solution and a balance strike in order to save stations while preventing trafficking and speculation.

F. Definition of a minor change

64. When LPFM was first created, §73.870(a) permitted LPFM (LP100) stations to move up to 2 kilometers as a minor change. The original *Report and Order* had offered no specific discussion on this specific provision. On reconsideration, the Commission allowed LPFM On reconsideration, the minor change distance was extended to 5.6 kilometers for LP100 stations.[92]

65. With the 2013 window and the increase in LPFM stations in urban areas due to the ability for second-adjacent waivers, there have been many circumstances where no viable or affordable tower sites within 5.6 kilometers of the authorized site. Since 2013, the Audio Division has routinely granted waivers of §73.870(a) to permit moves of more than 5.6 kilometers upon a compelling argument that there are no viable facilities.[93] In fact, REC has facilitated several of these applications. Of the applications that are granted, the one common attribute on most applications, although not necessarily intended, was that the service contour of the authorized facility and the service contour of the proposed facility would have some form of overlap. In this way, the Commission was processing LPFM applications in the same manner as FM translators.

---

[92] - See *Creation of A Low Power Radio Service*, Second Order on Reconsideration, 20 FCC Rcd 6763 (2005, "Second Recon") at 12-13.

[93] - See *Southside Media Collective,* BMPL-20150720AAH (Granted, July 22, 2015) (9.2 kilometer move justified due to a lack of viable sites within 5.6 km as well as well as offering the ability to move the LPFM station closer to the headquarters and the community the organization serves.); also *Sloan Canyon Communications*, BMPL-20140623AAG (Granted December 22, 2014) (12.3 kilometer move to move station closer to headquarters in a situation where all land between the transmitter site and the headquarters community was U.S. Forest Service land which did not permit tower construction.)

66. The current rule is burdensome because it limits moves in regulations yet many compelling arguments have been made to waive the rule and permit longer moves when such a move is in the public interest. REC proposes to codify the LPFM minor change policy to mirror that of FM translators in respect to location moves only. If an LPFM station wishes to make a move, the 60 dBu contour of the currently authorized facility must overlap the 60 dBu contour of the proposed facility. REC feels that with this change in the rules, the Audio Division will discontinue giving waivers to §73.870(a) for long facility moves. Not only will this eliminate the need for waivers and provide LPFM stations with more flexibility to relocate, it will also put LPFM on a level playing field with FM translators.

G. §73.3598: Period of construction

67. *History of construction periods for LPFM* - When the Commission created LPFM, it was created with an 18-month construction period for all LP-100 construction permits including original permits and modifications.[94] At the time, the Commission stated that it was "meant to reflect the simpler construction requirements for these facilities".[95] As many of the LPFM permits from the first window series have constructed, the Commission realized their original findings to be overly-optimistic.[96] Prior to the *Third R&O,* the Commission put in place a temporary policy where LPFM stations can request extensions to their construction periods to 36 months.[97] This was in response to concerns that some LPFM stations would not be able to meet the 18-month construction deadline.[98] The Commission, in the *Third R&O,* kept LPFM construction periods at 18 months but codified the ability to extend the construction period to 36 months upon a showing of good cause.[99] However, while no distinction was made in the text of

[94] - R&O at 187-189.

[95] - R&O at 187.

[96] - 3rd R&O at 38.

[97] - See *Creation of a Low Power Radio Service,* Further Notice of Proposed Rulemaking, 20 FCC Rcd 6763 ("FNPRM") at 26.

[98] - Id.

[99] - 3rd R&O at 40.

the *Third R&O* between "original" construction permits and modifications, the text of the codified rule reflects the policy only applying to "original" construction permits and not modifications.[100] This has created an issue for established LPFM stations that need to move. REC is aware of LPFM stations that have been able to get 18-month extensions to modification applications[101] and others that were not.[102]

68. *Shorter construction periods did not prevent speculation in 2013* - The original 18-month construction period rule was put in place in part to "[discourage] speculative or insufficiently thought out applications".[103] This mindset by the Commission only affected 8.9 percent of all granted original construction permits.[104] In fact, over 48 percent of all LPFM original construction permit grantees have requested the extension, of those, nearly half successfully completed construction and over one-third are still in active construction.

---

[100] - See 47 C.F.R. §73.3598(a) ("...each *original* construction permit for the construction of a *new* LPFM station shall specify a period of eighteen months from the date of issuance of the construction permit within which construction shall be completed and application for license filed. A LPFM permittee unable to complete construction within the time frame specified in the original construction permit may apply for an eighteen month extension upon a showing of good cause. The LPFM permittee must file for an extension on or before the expiration of the construction deadline specified in the original construction permit...") *(emphasis added)*

[101] - See *KWSS Radio*, BPL-20110720ACE; *The Life Church Wood River Inc.*, BPL-20160926ABA; *Oregon Amateur Radio Club*, BPL-20130904ABT; *Rootswork, Inc.*, BPL-20130930AQF; *Living River Ministries, Inc.*, BPL-20141222AAO; *Operation Refuge, Inc.*, BPL-20141223ABU; *Utah Local Radio*, BPL-20150526AAJ and *Cherokee FM Radio*, BPL-20151221CEL.

[102] - See *Quality Radio Partners*, BPL-20160126ADY, electronic mail from Gary Loehrs to Michelle Bradley denying an 18-month construction permit extension citing §73.3598(a) applying to only original construction permits.

[103] - NPRM at 78.

[104] - As of June 9, 2017, the following is a breakdown of the outcome of original construction permit (CP) applications filed in the 2013 LPFM window:

Granted active CP, still constructing within the first 18 months.	86	4.4%
Granted active CP, requested the 18 month extension.	330	16.8%
Expired CP, permittee did not request the 18 month extension.	176	8.9%
Expired CP despite permittee requesting the 18 month extension.	152	7.7%
Applicants able to complete construction within 18 months	749	38.0%
Applicants needing the 18 month extension in order to complete.	467	23.7%
License cancelled after application granted	9	0.5%

69. *The public interest favors extending the LPFM construction period* - With the realities of today's LPFM service, because of second adjacent channel waivers, the original thought of a 2000-era "easy" LP-100 installation is just not plausible. Because of specific antenna height requirements and the need to use larger multi-bay antennas in order to bring LPFM to some urban areas, LPFM permittees have had to move to large commercial towers and subject to similar construction conditions that FM translators are currently facing. As many LPFM stations are facing the same construction-related issues that FM translators are facing and in an effort to bring LPFM to a closer playing field with FM translators, we are proposing that §73.3598 be modified to remove the LPFM specific language and make LPFM construction periods consistent with TV, AM, FM, International Broadcast, Low Power TV, TV translator, TV booster, FM translator and FM booster stations with a 36-month construction period. This 36-month period should cover both original permits and modifications. This will also eliminate the administrative burden on Commission staff to manually extend expiration dates on granted permits. We stress, like with full-power and FM translator construction permits, this 36-month period cannot be extended except where permitted under existing tolling policy.[105]

V. CONCLUSION

70. Since the LPFM service was created in 2000, the service has evolved and matured. Other than two push-starts from Congress, the rules have not substantially changed since then, thus many 2000-era rules that are designed for simplification or out of fear of the unknown still exist in these rules. In that manner, we have to come to the realization that much of the fear of those early days was unfounded and as a result, the LPFM service has matured and is now in the hands of industry professionals. Recent events in the industry have called to attention that there remains disparity between the LPFM and the FM translator services including parts of the LCRA that were either misinterpreted or never interpreted. The solutions offered in this *Petition for Rulemaking* are intended to move LPFM closer to FM translators wherever possible and remain within the statutory boundaries of the LCRA. This *Petition* also will bring the LPFM service

[105] - See 47 C.F.R. §73.3598(b). Construction permits can be tolled due to natural disasters, grants subject to an administrative or judicial review and delays caused by international coordination.

much closer to the FM translator service within the limitations of the LCRA. In light of the outcomes of Auctions 99 and 100, LPFM stations have now been "short-spaced" and have lost much flexibility to make changes. REC's proposed changes address this short-spacing and allows LPFM stations more options for changes and presents them in a manner that is respectful to Commission policy and decorum and does not put the grant of any existing cross-service FM translator license at risk. With that, REC requests that the Commission adopt this rulemaking and help move LPFM forward to the next generation in a manner that strikes a balance between community need and crowded spectrum while respecting the status quo.

Respectfully submitted,

/S/
Michelle Bradley
REC Networks
11541 Riverton Wharf Rd.
Mardela Springs, MD 21837
http://recnet.com

June 13, 2018

APPENDIX A

REC proposed changes to rules

Part 73 of Title 47 of the U.S. Code of Federal Regulations is proposed to be amended to read as follows:

Part 73 – Radio Broadcast Services

1. Section 73.807 is proposed to be modified, as follows:

§73.807 Minimum distance separation between stations.

Minimum separation requirements for LPFM stations are listed in the following paragraphs. Except as noted below, an LPFM station will not be authorized unless the co-channel, and first- and second-adjacent channel separations are met. An LPFM station need not satisfy the third-adjacent channel separations listed in paragraphs (a) through (c) in order to be authorized.

Minimum distances for co-channel and first-adjacent channel are separated into two columns. The left-hand column lists the required minimum separation to protect other stations and the right-hand column lists (for informational purposes only) the minimum distance necessary for the LPFM station to receive no interference from other stations assumed to be operating at the maximum permitted facilities for the station class. For second-adjacent channel, the required minimum distance separation is sufficient to avoid interference received from other stations.

(a)(1) An LPFM station will not be authorized initially unless the minimum distance separations in the following table are met with respect to authorized FM stations, applications for new and existing FM stations filed prior to the release of the public notice announcing an LPFM window period, and vacant FM allotments. LPFM modification applications must either meet the distance separations in the following table or, if short-spaced, not lessen the spacing to subsequently authorized stations.

Station Class Protected by LPFM	Co-channel Minimum Separation (km)		First-adjacent Channel Minimum Separation (km)		Second and third adjacent Channel Minimum Separation (km)
	Required	For No Interference Received	Required	For No Interference Received	Required
D	24	24	13	13	6
A	67	92	56	56	29
B1	87	119	74	74	46
B	112	143	97	97	67
C3	78	119	67	67	40
C2	91	143	80	84	53
C1	111	178	100	111	73
C0	122	193	111	130	84
C	130	203	120	142	93

(a)(2) LPFM stations must satisfy the second-adjacent channel minimum distance separation requirements of paragraph (a)(1) of this section with respect to any third-adjacent channel FM station that, as of [INSERT NEW DATE], broadcasts a radio reading service via a subcarrier frequency.

(b) In addition to meeting or exceeding the minimum separations in paragraph (a), new LPFM stations will not be authorized in Puerto Rico or the Virgin Islands unless the minimum distance separations in the following tables are met with respect to authorized or proposed FM stations:

Station Class Protected by LPFM	Co-channel Minimum Separation (km)		First-adjacent Channel Minimum Separation (km)		Second and third adjacent Channel Minimum Separation (km)
	Required	For No Interference Received	Required	For No Interference Received	Required
A	80	111	70	70	42
B1	95	128	82	82	53
B	138	179	123	123	92

Note: Minimum distance separations towards "grandfathered" superpowered Reserved Band stations, subsections (a), (b), and (c) above :

Full service FM stations operating within the reserved band (Channels 201-220) with facilities in excess of those permitted in § 73.211(b)(1) or § 73.211(b)(3) shall be protected by LPFM stations in accordance with the minimum distance separations for the nearest class as determined under § 73.211. For example, a Class B1 station operating with facilities that result in a 60 dBu contour that exceeds 39 kilometers but is less than 52 kilometers would be protected by the Class B minimum distance separations. Class D stations with 60 dBu contours that exceed 5 kilometers will be protected by the Class A minimum distance separations. Class B stations with 60 dBu contours that exceed 52 kilometers will be protected as Class C1 or Class C stations depending upon the distance to the 60 dBu contour. No stations will be protected beyond Class C separations.

(c) In addition to meeting the separations specified in paragraphs (a) and (b), LPFM applications must meet the minimum separation requirements in the following table with respect to authorized FM translator stations, cutoff FM translator applications, and FM translator applications authorized LPFM stations, LPFM station applications that were timely-filed within a previous window, and other LPFM and FM translator stations filed prior to the release of the Public Notice announcing the LPFM window period.

Distance to 60 dBu	Co-channel Minimum Separation (km) For No Interference Required	Received	First-adjacent Channel Minimum Separation (km) For No Interference Required	Received	Second and third adjacent Channel Minimum Separation (km) Required
FM translators: 13.3 km or greater	39	67	28	35	21
FM translators: Greater than 7.3 km, but less than 13.3 km	32	51	21	26	14
FM translators: Less than 7.3 km	26	30	15	16	8
LPFM stations: Less than or equal to 5.6 km	24	24	14	14	None
LPFM stations: Greater than 5.6 km	26	31	15	16	None

(d)(1) Existing LPFM stations which do not satisfy the separations in paragraphs (a) through (c) of this section may be relocated provided that the separation to any short-spaced station is not reduced.

(d)(2) LPFM proposals which do not satisfy the minimum distance separations in paragraphs (a) through (c) of this section and do not meet the requirements of subparagraph (d)(1) may be accepted for filing in accordance with §73.815 of this Subpart.

(d)(3) LPFM proposals specify an effective radiated power that exceeds 0.1 kilowatts at 30 meters height above average terrain must also satisfy the contour overlap requirements in accordance with §73.815 of this Subpart.

* * * * *

(g) * * * * *

(1) * * *

(2) * * *

(3) * * *

(4) * * *

(5)(i) LPFM stations located within 125 kilometers of the Mexico border are limited to 50 watts (0.05 kW) ERP, a 60 dBu service contour of 8.7 kilometers and a 34 dBu interfering contour of 32 kilometers in the direction of the Mexican border. LPFM stations may operate up to 100 watts in all other directions.

(ii) LPFM stations located between 125 kilometers and 320 kilometers from the Mexican border may operate in excess of 50 watts, up to a maximum ERP of 100 watts. However, in no event shall the location of the 60 dBu contour lie within 116.3 km of the Mexican border.

(iii) Applications for LPFM stations within 320 km of the Canadian border may employ an ERP of up to a maximum of 100 watts. The distance to the 34 dBu interfering contour may not exceed 60 km in any direction.

2. In Section 73.809, modify the title and add a new paragraph (f) as follows:

§73.809 Interference protection to other radio broadcast facilities.

* * * * *

(f) *LPFM stations specifying protection in accordance with §73.815:*

(1) An application for an LPFM station will not be accepted for filing even the proposed operation satisfies the minimum separation requirements in §73.815(a) and would not involve the overlap of field strength contours with any other Full-service FM station, Class D (Secondary) Noncommercial Educational broadcast station, FM translator, FM booster or LPFM station as set forth in §73.815(b) of this subpart, if the predicted 1 mV/m contour of the LPFM station will overlap a populated area already receiving a regularly used, off-the-air signal of the authorized co-channel or first-adjacent channel Full-service FM station, Class D (Secondary) Noncommercial Educational broadcast station, FM translator, FM booster station and LPFM stations for which alternative processing under §73.815 was specified.

(2) An authorized LPFM station specifying protection to FM translators, FM boosters and other LPFM stations in accordance with §73.815 of this subpart will not be permitted to continue to operate if it causes any actual interference to the direct reception by the public of off-the-air signals of the authorized co-channel or first-adjacent channel Full-service FM station, Class D (Secondary) Noncommercial Educational broadcast station, FM translator, FM booster and LPFM stations for which alternative processing under §73.815 was specified.

3. Section 73.811 is proposed to be modified, as follows:

§73.811 LPFM power and antenna height requirements

(a) *Maximum facilities.* LPFM stations will be authorized to operate with maximum facilities of 250 watts ERP at 30 minutes HAAT. An LPFM station with a HAAT that exceeds 30 meters will not be permitted to operate with an ERP greater than that whic would result in a 1 mV/m contour of 7.1 kilometers. In no event will an ERP less than one watt be authorized.

(b) *Minimum facilities.* LPFM stations may not operate with facilities less than 50 watts ERP at 30 meters HAAT or the equivalent necessary to produce a 1 mV/m contour that extends at least 4.7 kilometers.

(c) LPFM stations located within 320 kilometers of the Mexican border may operate with facilities of less than the minimum defined in paragraph (b) of this section upon showing that operation at such facilities is necessary in accordance with §73.807(g)(5) of this subpart.

4. A new section 73.815 is proposed to be added, as follows:

§73.815 Contour protection regime.

(a) LPFM proposals that do not satisfy the minimum distance separations in §73.807, paragraphs (a) through (c) and do not meet the requirements of §73.807(d)(1) as well as any LPFM proposal that specifies a 1 mV/m protected service contour that exceeds 12.7 kilometers in any direction may be accepted for filing if they can satisfy the following requirements as set forth:

(1) An LPFM station will not be authorized under this section unless the minimum distance separations in the following table are met with respect to authorized FM stations, applications for new and existing FM stations filed prior to the release of the public notice announcing an LPFM window period, and vacant FM allotments as set forth:

Station class protected by LPFM	Co-channel minimum separation (km) required	First-adjacent channel minimum separation (km) required	I.F. channel minimum separations 10.6 or 10.8 MHz
D	16	10	3
A	59	53	6
B1	77	70	9
B	99	91	12
C3	69	64	9
C2	82	77	12
C1	103	97	20
C0	114	108	22
C	122	116	28

(2) In addition to meeting or exceeding the minimum distance separations in subparagraph (1), LPFM stations in Puerto Rico and the Virgin Islands must also meet the following minimum distance separations as set forth:

Station class protected by LPFM	Co-channel minimum separation (km) required	First-adjacent channel minimum separation (km) required	I.F. channel minimum separations 10.6 or 10.8 MHz
A	72	66	9
B1	84	78	11
B	126	118	19

(3) In respect to FM translators, FM boosters and other LPFM stations, no minimum distance separation is specified.

(4) LPFM stations operating with 100 watts effective radiated power (ERP) or less need not satisfy the I.F. channel minimum separation requirements.

(b) In addition to satisfying the minimum distance separation requirements in paragraph (a) of this section in respect to commercial full-service FM stations, noncommercial full-service FM stations, Class D (secondary) noncommercial educational FM stations, FM translator stations, FM booster stations and other LPFM stations, an application for an LPFM station will not be accepted for filing if it would involve overlap of predicted field contours with any other authorized full-service FM station, Class D (secondary)

noncommercial educational FM broadcast stations, FM translator stations, FM booster stations and other LPFM stations,; of if it would result in increased overlap as set forth:

(1) Commercial Class B FM Stations (Protected Contour: 0.5 mV/m)

Frequency separation	Interference contour of proposed LPFM station	Protected contour of commercial Class B station
Cochannel	0.05 mV/m (34 dBu)	0.5 mV/m (54 dBu)
200 kHz	0.25 mV/m (48 dBu)	0.5 mV/m (54 dBu)

(2) Commercial Class B1 FM Stations (Protected Contour: 0.7 mV/m)

Frequency separation	Interference contour of proposed LPFM station	Protected contour of commercial Class B station
Cochannel	0.07 mV/m (37 dBu)	0.7 mV/m (57 dBu)
200 kHz	0.35 mV/m (51 dBu)	0.7 mV/m (57 dBu)

(3) Any other classes of full-service FM stations, Class D (Secondary) noncommercial educational FM broadcast stations, FM translator stations, FM booster stations and LPFM stations (Protected Contour: 1 mV/m)

Frequency separation	Interference contour of proposed LPFM station	Protected contour of commercial Class B station
Cochannel	0.1 mV/m (40 dBu)	1 mV/m (60 dBu)
200 kHz	0.5 mV/m (54 dBu)	1 mV/m (60 dBu)

(c) The following standards must be used to compute the distances to the pertinent contours:

(1) The distances to the protected contours are computed using Figure 1 of § 73.333 [F(50,50) curves] of this chapter.

(2) The distances to the interference contours are computed using Figure 1a of § 73.333 [F(50,10) curves] of this chapter. In the event that the distance to the contour is below 16 kilometers (approximately 10 miles), and therefore not covered by Figure 1a, curves in Figure 1 must be used.

(3) The effective radiated power (ERP) to be used is the maximum ERP of the main radiated lobe in the pertinent azimuthal direction. If the transmitting antenna is not horizontally polarized only, either the vertical component or the horizontal component of the ERP should be used, whichever is greater in the pertinent azimuthal direction.

(4) The antenna height to be used is the height of the radiation center above the average terrain along each pertinent radial, determined in accordance with § 73.313(d) of this chapter.

5. Section 73.816 is proposed to be modified, as follows:

§73.816 Antennas

* * * * *

(c) Directional antennas may be utilized LPFM as set forth:

(1) Public safety and transportation permittees and licensees, eligible pursuant to § 73.853(a)(ii), in connection with the operation of a Travelers' Information Service (TIS)

(2) LPFM permittees and licensees proposing a waiver of the second-adjacent channel spacing requirements of Section 73.807 may utilize directional antennas for the sole purpose of justifying such a waiver.

(3) LPFM permittees and licensees proposing operation involving contour overlap protections in accordance with §73.815 of this subpart may utilize directional antennas in order to demonstrate compliance.

(4) LPFM permittees and licensees proposing operation within 320 kilometers of the Mexican or Canadian border in accordance with §73.807(g)(5) of this subpart.

(d) *Directional antennas.*

(1) Composite antennas and antenna arrays may be used where the total ERP does not exceed the maximum determined in accordance with §73.811(a) of this subpart.

(2) Either horizontal, vertical, circular or elliptical polarization may be used provided that the supplemental vertically polarized ERP required for circular or elliptical polarization does not exceed the ERP otherwise authorized. Either clockwise or counterclockwise rotation may be used. Separate transmitting antennas are permitted if both horizontal and vertical polarization is to be provided.

(3) All applications must comply with § 73.316, paragraphs (d) and (e) of this chapter.

(4) An application that specifies the use of a directional antenna must: (1) Certify that the antenna is mounted in accordance with the specific instructions provided by the antenna manufacturer; and (2) certify that the antenna is mounted in the proper orientation. In instances where a directional antenna is proposed for providing protection to another facility, a condition may be included in the construction permit requiring that before program tests are authorized, a permittee: (1) Must submit the results of a complete proof-of-performance to

establish the horizontal plane radiation patterns for both the horizontally and vertically polarized radiation components; and, (2) must certify that the relative field strength of neither the measured horizontally nor vertically polarized radiation component shall exceed at any azimuth the value on the composite radiation pattern authorized by the construction permit.

6. Section 73.825 is proposed to be modified, as follows:

§73.825 Protection to reception of TV channel 6

The provisions of this section apply to all applications for construction permits for new or modified facilities for a LPFM station on Channels 201-220, unless the application is accompanied by a written agreement between the LPFM applicant and each affected TV Channel 6 broadcast station, Low Power TV and Class-A TV licensee or permittee concurring with the proposed LPFM facility.

(a) Except as provided in paragraphs (b) and (c) of this section, LPFM stations will be authorized on Channels 201 through 220 if the pertinent minimum separation distances in the following table are met with respect to all full power TV Channel 6 stations as well as in respect to all Low Power TV and Class-A TV stations which are authorized to operate on Channel 6:.

FM Channels	**Distance to TV Channel 6 (kilometers)**	**Distance to LPTV/Class-A Channel 6 (kilometers)**
201	140	98
202	138	97
203	137	95
204	136	94
205	135	93
206 through 211	133	91
212 through 214	132	90
215	131	90
216 through 218	131	89
219 through 220	130	89

(b) *Collocated stations.* An application for a LPFM station operating on Channels 201-220 and located at 0.4 kilometers or less from a TV Channel 6 station will be accepted if it includes a certification that the applicant has coordinated the antenna with the affected TV station.

(c) *Contour overlap.* Except as provided in paragraphs (a) and (b) of this section, an application for a LPFM station operating on Channels 201-220 will not be accepted if the proposed operation will involve overlap of its interference field strength contour with any TV Channel 6 station's Grade B contour, as set forth below.

(1) The distances to the TV Channel 6 Grade B (47 dBu) field strength contour will be predicted according to the procedures specified in §73.684 of this chapter, using the F(50,50) curves in §73.699, Figure 9 of this chapter.

(2) The distances to the acceptable LPFM interference contour will be predicted according to the procedures specified in §73.815(c) of this part.

(3) The applicable LPFM interference contours are as follows:

FM Channels	**Interference contour F(50,10) curves (dBu)**
201	54
202	56
203	59
204	62
205	64
206	69
207	73
208	73
209	73
210	73
211	73
212	74
213	75
214	77
215	78
216	80
217	81
218	85
219	88
220	90

7. Section 73.860 is proposed to be modified as follows

§73.860 Cross-ownership.

* * * * *

(b) A party that is not a Tribal Applicant, as defined in §73.853(c), may hold attributable interests in one LPFM station and no more than two FM translator, two FM booster stations or one FM translator and one FM booster station provided that the following requirements are met:

(1) The FM translator and/or booster station(s), at all times, synchronously rebroadcasts the primary analog signal of the commonly-owned LPFM station or, if the commonly-owned LPFM station operates in hybrid mode, synchronously rebroadcasts the digital HD-1 version of the LPFM station's signal;

(2) The transmitting antenna of the FM translator and/or booster station(s) is located within 16.1 km (10 miles) for LPFM stations located in the top 50 urban markets and 32.1 km (20 miles) for LPFM stations outside the top 50 urban markets of either the transmitter site of the commonly-owned LPFM station or the reference coordinates for that station's community of license.

(3) The FM booster station(s) 60 dBu service contour must remain entirely within the 60 dBu service contour of the commonly-owned LPFM station.

* * * * *

8. Section 73.865 is proposed to be replaced as follows

§73.865 Assignment and transfer of LPFM authorizations.

(a) *Assignment/Transfer:* No party may assign or transfer an LPFM license or permit if:

(1) Consideration promised or received exceeds the depreciated fair market value of the physical equipment and facilities; and/or

(2) The transferee or assignee is incapable of satisfying all eligibility criteria that apply to a LPFM licensee.

(3) To demonstrate compliance with subparagraph (a)(1), the assignment application must include the amount of consideration for the transaction a complete detailed schedule including a description and value of all physical equipment and facilities associated with the transaction.

(4)(i) Within the first four (4) years of licensed operation or any time during the construction period, LPFM stations that were granted based on in accordance with §73.872 of this subpart may only be assigned to organizations, which on the date of the filing of the original construction permit application would meet or exceed the number of points as determined under §73.872(b).

(ii) LPFM stations selected in accordance with §73.872(d)(3) may only be assigned to an organization with a verifiable local presence date that is older than the granted group with the latest local presence date at the time of the grant of the original construction permit application.

(b) A change in the name of an LPFM licensee where no change in ownership or control is involved may be accomplished by written notification by the licensee to the Commission.

(c) *Holding period on original construction permits:* An original construction permit may not be assigned for 18 months from the date of original permit grant. The assignee must be prepared to complete construction of the station. Unless otherwise permitted in accordance with §73.3598(b), requests for further extensions of granted construction permits will not be entertained.

(d) Transfers of control involving a sudden change of more than 50 percent of an LPFM's governing board shall not be deemed a substantial change in ownership or control, subject to the filing of an FCC Form 316.

9. Section 73.870 is proposed to be modified as follows

§73.870 Processing of LPFM broadcast station applications.

(a) A minor change for an LPFM station authorized under this subpart is limited to transmitter site relocations where the 60 dBu contour of the authorized facility overlaps the 60 dBu contour of the proposed facility. These distance limitations do not apply to amendments or applications proposing transmitter site relocation to a common location filed by applicants that are parties to a voluntary time-sharing agreement with regard to their stations pursuant to § 73.872 paragraphs (c) and (e). These distance limitations also do not apply to an amendment or application proposing transmitter site relocation to a common location or a location very close to another station operating on a third-adjacent channel in order to remediate interference to the other station; provided, however, that the proposed relocation is consistent with all localism certifications made by the applicant in its original application for the LPFM station. Minor changes of LPFM stations may include:

(1) Changes in frequency to adjacent or I.F. frequencies (+/- 1, 2, 3, 53 or 54 channels) or, upon a technical showing of reduced interference, to any frequency; and

(2) Amendments to time-sharing agreements, including universal agreements that supersede involuntary arrangements.

* * * * * *

* * * * * *

10. Section 73.871 is proposed to be modified as follows

§73.871 Amendment of LPFM broadcast station applications.

* * * * * *

(c) * * * * * *

(1) Filings subject to paragraph (c)(5) of this section, site relocations that involve overlap between the 60 dBu service contour of the currently authorized or originally-proposed facility and the 60 dBu service contour of the newly-proposed facility;

(2) Changes in ownership at where at least 50 percent of the individuals named as parties on the original application are retained, subject to paragraph (d) of this section;

(3) Universal voluntary time-sharing agreements to apportion vacant time among the licensees;

(4) Other changes in general and/or legal information;

(5) Filings proposing transmitter site relocation to a common location submitted by applications that are parties to a voluntary time-sharing agreement with regard to their stations pursuant to §73.872 (c) and (e); and

(6) Filings proposing transmitter site relocation to a common location or a location very close to another station operating on a third-adjacent channel in order to remediate interference to the other station.

(d) Amendments that change the ownership in accordance with paragraph (c)(2) of this section must include supporting documentation such as revised articles of incorporation that reflect the change in ownership.

(e) Unauthorized or untimely amendments are subject to return by the FCC's staff without consideration.

11. Section 73.3598 is proposed to be modified, as follows:

§73.3598 Period of construction.

(a) Except as provided in the last two sentences of this paragraph, each original construction permit for the construction of a new TV, AM, FM or International Broadcast; low power TV; TV translator; TV booster; LPFM; FM translator; or FM booster station, or to make changes in such existing stations, shall specify a period of three years from the date of issuance of the original construction permit within which construction shall be completed and application for license filed. An eligible entity that acquires an issued and outstanding construction permit for a station in any of the services listed in this paragraph shall have the time remaining on the construction permit or eighteen months from the consummation of the assignment or transfer of control, whichever is longer, within which to complete construction and file an application for license. For purposes of the preceding sentence, an "eligible entity" shall include any entity that qualifies as a small business under the Small Business Administration's size standards for its industry grouping, as set forth in 13 CFR 121 through 201, at the time the transaction is approved by the FCC, and holds

(1) 30 percent or more of the stock or partnership interests and more than 50 percent of the voting power of the corporation or partnership that will hold the construction permit; or

(2) 15 percent or more of the stock or partnership interests and more than 50 percent of the voting power of the corporation or partnership that will hold the construction permit, provided that no other person or entity owns or controls more than 25 percent of the outstanding stock or partnership interests; or

(3) More than 50 percent of the voting power of the corporation that will hold the construction permit if such corporation is a publicly traded company.

* * * * * *

Part 74 of Title 47 of the U.S. Code of Federal Regulations is proposed to be amended to read as follows:

Part 74 – Experimental Radio, Auxiliary, Special Broadcast and other program distributional services.

1. Section 74.1204 is proposed to be modified, as follows:

§74.1201 Definitions.

* * * * * *

(f) FM broadcast booster station. A station in the broadcasting service operated for the sole purpose of retransmitting the signals of an FM radio broadcast station, by amplifying and reradiating such signals, without significantly altering any characteristic of the incoming signal other than its amplitude. Unless specified otherwise, includes LPFM boosters as defined in paragraph (k) of this section.

* * * * * *

(k) LPFM booster. An FM broadcast booster station as defined in paragraph (f) of this section that is commonly-owned by an LPFM station for the purpose of retransmitting the signals of the commonly-owned LPFM station.

2. Section 74,1203 is proposed to modified, as follows:

§74.1203 Interference.

(a) An authorized FM translator station, FM booster station or LPFM booster will not be permitted to continue to operate if it causes any actual interference to:

(1) * * *

(2) * * *

(3) The direct reception by the public of the off-the-air signals of any authorized broadcast station including TV Channel 6 stations, Class D (secondary) noncommercial educational FM stations, LPFM stations and previously authorized and operating FM translators and FM booster stations. Interference will be considered to occur whenever reception of a regularly used signal is impaired by the signals radiated by the FM translator or booster station, regardless of the quality of such reception, the strength of the signal so used, or the channel on which the protected signal is transmitted.

(b) If interference cannot be properly eliminated by the application of suitable techniques, operation of the offending FM translator station, FM booster station or LPFM booster shall be suspended and shall not be resumed until the interference has been eliminated. Short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures. If a complainant refuses to permit the FM translator or booster licensee to apply remedial techniques which demonstrably will eliminate the interference without impairment to the original reception, the licensee of the FM translator or booster station is absolved of further responsibility for that complaint.

(c) An FM booster station or LPFM booster will be exempted from the provisions of paragraphs (a) and (b) of this section to the extent that it may cause limited interference to its primary station's signal, provided it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the principal community of its primary station.

(d) * * * * * *

(e) It shall be the responsibility of the licensee of an FM translator station, FM booster station or LPFM booster to correct any condition of interference which results from the radiation of radio frequency energy by its equipment on any frequency outside the assigned channel. Upon notice by the Commission to the station licensee that such interference is being caused, the operation of the FM translator or FM booster station shall be suspended within three minutes and shall not be resumed until the interference has been eliminated or it can be demonstrated that the interference is not due to spurious emissions by the FM translator or FM booster station; provided, however, that short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures.

3. Section 74.1204 is proposed to be retitled and modified, as follows:

§74.1204 Protection of FM broadcast, FM translators and LPFM stations.

(a) * * * * *

(b) * * * * *

(c) An application for a change (other than a change in channel) in the authorized facilities of an FM translator station or LPFM booster will be accepted even though overlap of field strength contours would occur with another station in an area where such overlap does not already exist, if:

(1) * * *

(2) * * *

(3) * * *

(4) * * *

(d) * * * * * *

(e) * * * * * *

(f) An application for an FM translator station or LPFM booster will not be accepted for filing even though the proposed operation would not involve overlap of field strength contours with any other station, as set forth in paragraph (a) of this section, if the predicted 1 mV/m field strength contour of the FM translator station will overlap a populated area already receiving a regularly used, off-the-air signal of any authorized co-channel, first, second or third adjacent channel broadcast station, including Class D (secondary) noncommercial educational FM stations and grant of the authorization will result in interference to the reception of such signal.

(g) An application for an FM translator or an FM booster station that is 53 or 54 channels removed from an FM radio broadcast station will not be accepted for filing if it fails to meet the required separation distances set out in § 73.207 of this chapter. For purposes of determining compliance with § 73.207 of this chapter, translator stations will be treated as Class A stations and booster stations will be treated the same as their FM radio broadcast station equivalents. FM radio broadcast station equivalents will be determined in accordance with §§ 73.210 and 73.211 of this chapter, based on the booster station's ERP and HAAT. Provided, however, that FM translator stations and booster stations operating with 100 watts ERP or less will be treated as class D stations and will not be subject to intermediate frequency separation requirements.

(h) * * * * * *

(i) * * * * * *

(j) * * * * * *

4. Section 74.1205 is proposed to modified, as follows:

§74.1205 Protection of channel 6 TV broadcast stations.

The provisions of this section apply to all applications for construction permits for new or modified facilities for a noncommercial educational FM translator station or LPFM booster on Channels 201-220, unless the application is accompanied by a written agreement between the NCE-FM translator applicant and each affected TV Channel 6 broadcast station licensee or permittee concurring with the proposed NCE-FM translator or LPFM booster facility.

(a) An application for a construction permit for new or modified facilities for a noncommercial educational FM translator station or LPFM booster facility operating on Channels 201-220 must include a showing that demonstrates compliance with paragraph (b), (c) or (d) of this section if it is within the following distances of a TV broadcast station which is authorized to operate on Channel 6.

* * * * * *

(b) *Collocated stations.* An application for a noncommercial educational FM translator station or LPFM booster operating on Channels 201-220 and located at 0.4 kilometer (approximately 0.25 mile) or less from a TV Channel 6 station will be accepted if it includes a certification that the applicant has coordinated its antenna with the affected TV station.

(c) *Contour overlap.* Except as provided in paragraph (b) of this section, an application for a noncommercial educational FM translator station or LPFM booster operating on Channels 201-220 will not be accepted if the proposed operation would involve overlap of its interference field strength contour with any TV Channel 6 station's Grade B contour, as set forth below.

(1) * * *

(2) The distances to the applicable noncommercial educational FM translator or LPFM booster interference contour will be predicted according to the procedures specified in § 74.1204(b) of this part.

(3) The applicable noncommercial educational FM translator or LPFM booster interference contours are as follows:

(d) * * * * * *

5. Section 74.1231 is proposed to modified, as follows:

§74.1231 Purpose and permissible service.

* * * * * *

(j) FM broadcast booster stations and LPFM boosters provide a means whereby the licensee of an FM broadcast station or LPFM may provide service to areas in any region within the primary station's predicted, authorized service contours. An FM broadcast booster station is authorized to retransmit only the signals of its primary station which have been received directly through space and suitably amplified, or received by alternative signal delivery means including, but not limited to, satellite and terrestrial microwave facilities. The FM booster station or LPFM boosters shall not retransmit the signals of any other station nor make independent transmissions, except that locally

generated signals may be used to excite the booster apparatus for the purpose of conducting tests and measurements essential to the proper installation and maintenance of the apparatus.

6. Section 74.1232 is proposed to modified, as follows:

§74.1232 Eligibility and licensing requirements.

* * * * * *

(f) An FM broadcast booster station and LPFM booster will be authorized only to the licensee or permittee of the FM radio broadcast station or LPFM station whose signals the booster station will retransmit, to serve areas within the protected contour of the primary station, subject to Note, § 74.1231(h) of this part.

(g) No numerical limit is placed upon the number of FM and LPFM booster stations which may be licensed to a single licensee. A separate application is required for each FM booster station or LPFM booster. FM broadcast booster stations are not counted as FM broadcast stations for the purposes of § 73.5555 of this chapter concerning multiple ownership.

* * * * * *

7. Section 74.1235 is proposed to modified, as follows:

§74.1235 Power limitations and antenna systems.

* * * * * *

(d) Applications for FM translator stations and LPFM boosters located within 320 km of the Canadian border will not be accepted if they specify more than 50 watts effective radiated power in any direction or have a 34 dBu interference contour, calculated in accordance with § 74.1204 of this part, that exceeds 32 km. FM translator stations, And LPFM boosters located within 320 kilometers of the Mexican border must be separated from Mexican allotments and assignments in accordance with § 73.207(b)(3) of this chapter and are limited to a transmitter power output of 10 watts or less. For purposes of compliance with that section, FM translators, And LPFM boosters will be considered as Class D FM stations.

(1) Translator stations and LPFM boosters located within 125 kilometers of the Mexican border may operate with an ERP up to 50 watts (0.050 kW) ERP. A booster stationor LPFM booster may not produce a 34 dBu interfering contour in excess of 32 km from the transmitter site in the direction of the Mexican border, nor may the 60 dBu service contour of the booster stationor LPFM booster exceed 8.7 km from the transmitter site in the direction of the Mexican border.

(2) Translator stations and LPFM boosters located between 125 kilometers and 320 kilometers from the Mexican border may operate with an ERP in excess of 50 watts, up to the maximum permitted ERP of 250 watts per § 74.1235(b)(2). However, in no event shall the location of the 60 dBu contour lie within 116.3 km of the Mexican border.

(3) Applications for translator or booster stations (including And LPFM boosters) within 320 km of the Canadian border may employ an ERP up to a maximum of 250 watts, as specified in § 74.1235(a) and (b). The distance to the 34 dBu interfering contour may not exceed 60 km in any direction.

* * * * * *

8. Section 74.1263 is proposed to modified, as follows:

§74.1263 Time of operation.

* * * * * *

(b) A booster station rebroadcasting the signal of an AM, FM or LPFM primary station shall not be permitted to radiate during extended periods when signals of the primary station are not being retransmitted. Notwithstanding the foregoing, FM translators rebroadcasting Class D AM stations may continue to operate during nighttime hours only if the AM station has operated within the last 24 hours.

* * * * * *

9. Section 74.1283 is proposed to modified, as follows:

§74.1283 Station identification.

* * * * * *

(b)The call sign of an FM booster station or LPFM booster will consist of the call sign of the primary station followed by the letters “FM” or “LP” and the number of the booster station being authorized, e.g., WFCCFM-1 or WRECLP-1.

* * * * * *

10. Section 74.1290 is proposed to modified, as follows:

§74.1290 FM translator and booster station information available on the Internet.

The Media Bureau's Audio Division provides information on the Internet regarding FM translator and booster stations, rules, and policies at https://www.fcc.gov/media/radio/audio-division.

APPENDIX B

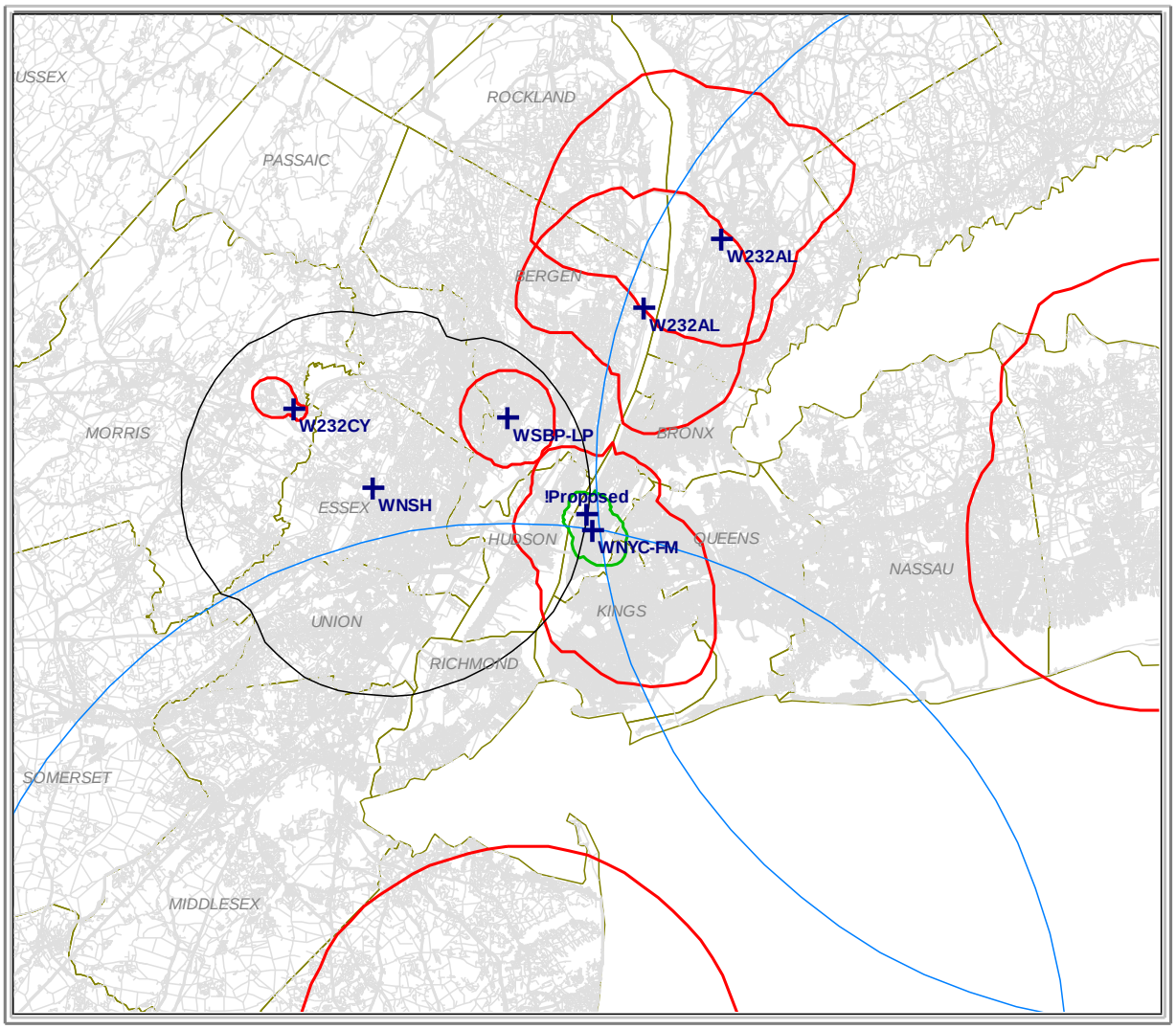
Four Potential LPFM Channels for New York City

Using REC's proposed rules including the LP-10 distance separation tables, directional antennas and contour overlap, the following a demonstration of a way that at least 4 new LPFM channels can be added in the New York 5-burough area and be consistent with the Local Community Radio Act.

Contour colors:
GREEN – 60 dBu service of proposed facility
RED – 40 dBu interfering on the proposed facility, 60 dBu service on the incumbent.
ORANGE – 34 dBu interfering on the proposed facility, 54 dBu service on the incumbent.
BLACK – used to measure field strength of weakest second-adjacent channel station (see footer).
BLUE – proposed §73.807(a) minimum distance separation based on LP-10 tables.

REC Networks 202 621-2355 Monday, June 11, 2018

New York 232 (94.3) "Hells Kitchen"

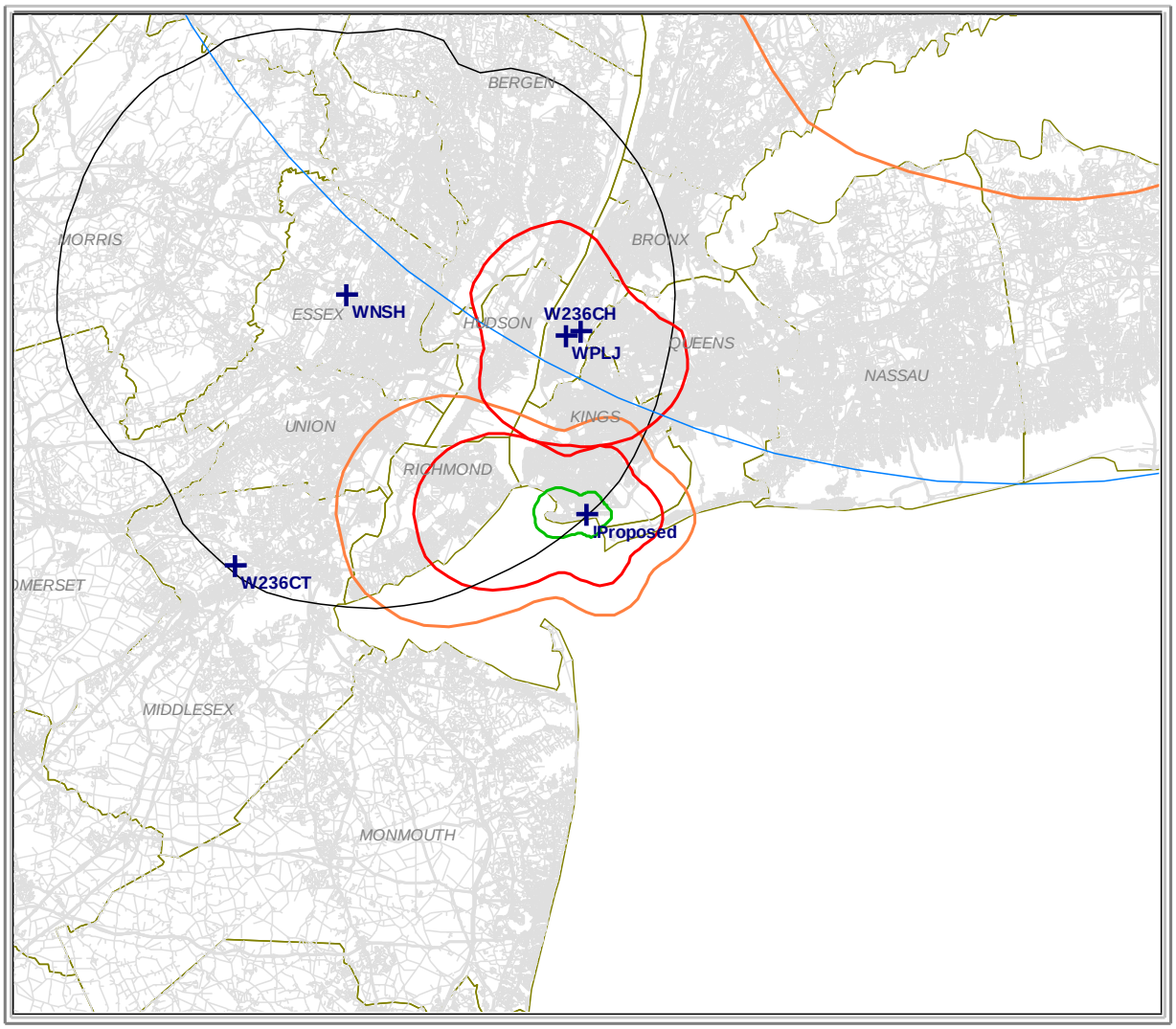


100w 34.4m AGL CA5-CP-RM 150deg - 2adj: WNSH 78.2 dBu

Map Scale: 1:601032 1 cm = 6.01 km V|H Size: 105.84 x 118.68 km

REC Networks 202 621-2355 Monday, June 11, 2018

New York 236 (95.1) "Brighton Beach"

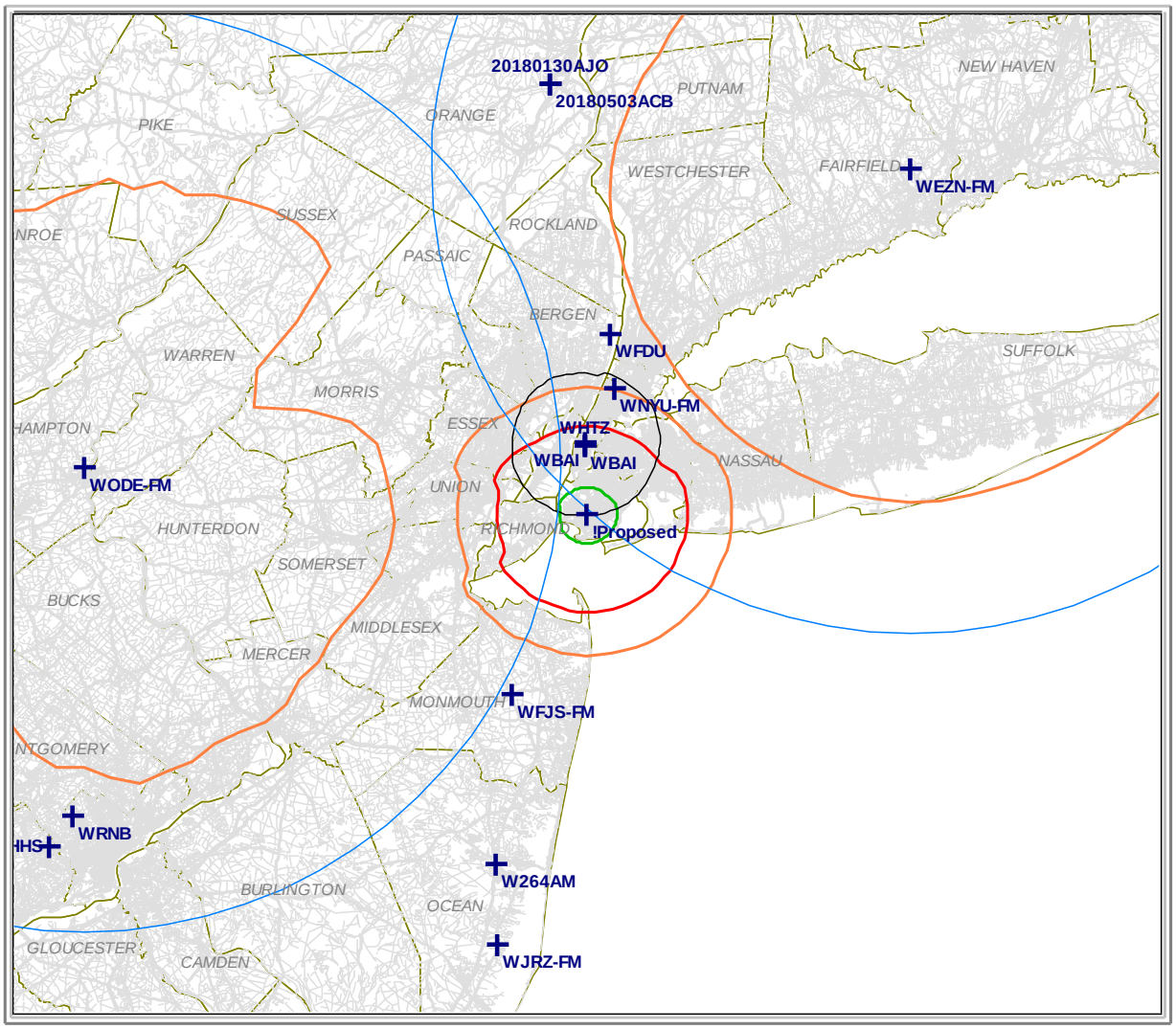


90w 30m AGL CA5-CP-RM 272deg - 2adj: WNSH 70.5 dBu

Map Scale: 1:601032 1 cm = 6.01 km V|H Size: 105.84 x 118.68 km

REC Networks 202 621-2355 Monday, June 11, 2018

New York 260 (99.9) "Mapleton"

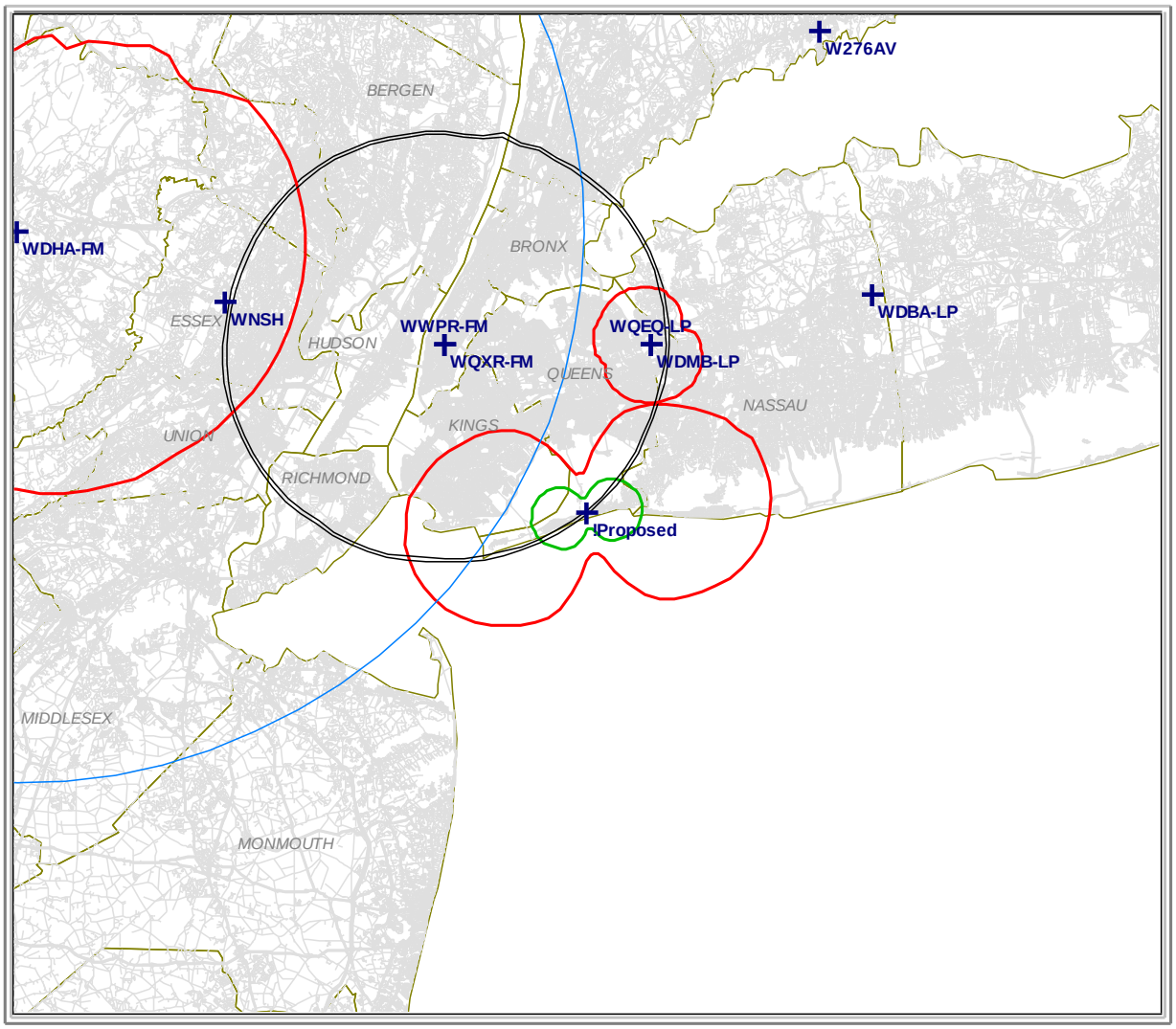


100w 28m AGL non-directional - 2adj: WBAI(CP) 82.1 dBu

Map Scale: 1:1202064 1 cm = 12.02 km V|H Size: 211.68 x 237.36 km

REC Networks 202 621-2355 Monday, June 11, 2018

New York 288 (105.5) "Rockaway Beach"



100w 30m AGL - Scala CL-FM Vertical peanut 80/260 degrees - 2adj: WQXR 66.3 dBu

Map Scale: 1:601032 1 cm = 6.01 km V|H Size: 105.84 x 118.68 km

APPENDIX C

LPFM Channel Availability by ZIP Code

(Data is in separate file attached to this petition.)

READING THE DATA *(Sample shown...)*

ZIPCD	COMMUNITY		Centroid Latitd	Centroid Longitd	Approx. Census	Addl Chan	LP100 Avail	LP100 2-Adj	LP100 Rv	LP-10 Avail	LP-10 2-Adj	LP-10 Rv	Nearby FL	Nearby FX	Nearby TV
60436	ROCKDALE	IL	41.509	88.136	23888	0	0	2	0	0	2	0	0	1	1
61101	ROCKFORD	IL	42.292	89.116	23908	5	0	4	0	3	9	0	0	7	1
61102	ROCKFORD	IL	42.255	89.125	19427	6	1	5	0	3	11	0	0	7	1

ZIPCD: 2000 US Census ZIP Code Tabulation Area (ZCTA)
Community: ZCTA community name and state.
Centroid: Coordinates used for search (NAD27).
Approx Census: 2000 census for this ZCTA (population count has no bearing in this report).
Addl Chan: Count of additional channels if LPFM switches to using LP10 charts.
For each table:

Avail: Count of channels available that do not require a second adjacent channel waiver.
2-Adj: Count of channels available that may or may not require a second adjacent channel waiver (subtract 2-Adj from Avail to determine number of additional channels).
Rv: Of channels available (with or without 2nd adj. waiver), count of channels in the reserved band (88.1~91.9 MHz)

Nearby FL: LPFM stations within 6 km of the search site.
Nearby FX: FM translators within 18 km of the search site.
Nearby TV: TV Channel 6 stations that triggered a short-spacing on one or more FM channels.

NOTES ABOUT THIS DATA

- Based on the FCC CDBS data as of end-of-business on June 23, 2017 of engineering records marked in CDBS as "current".
- Channel availability is based solely on distance separation of full-service FM, FM translator, LPFM, TV channel 6 and foreign stations.
- Channel availability is based on the single point searched only and may not reflect availability in other parts of the ZIP code.
- Even if there is an increase in channels if LPFM switches to the LP10 distance separation charts, it does not necessarily mean the channel is available due to inbound interference from a nearby full-service FM or FM translator station.
- Using the contour overlap rules we have proposed in respect to FM translators, LPFM stations or TV channel 6 stations, additional channels may become available.
- Especially for foothill locations, this list does not take into consideration any power reductions as a result of overlap between the LPFM interfering contour and the full-service FM protected service contour.
- Some channels may become unavailable due to the upcoming Auction 99 cross-service FM translator filing window.

APPENDIX D

Proposed changes – quick reference chart

	Current LPFM rules	Proposed §73.807 Regime	Proposed §73.815 Regime	Current FM Translator Rules
Minimum distance separation	Based on LP100 for all services	Based on LP100 for all services	Based on LP10 for full-service only no distance requirement to LPFM/translator	Only used for separation to IF on translators 100 watts or more
Contour protection	Only used for short-spaced second adjacent channel	Only used for short-spaced second adjacent channel	Used for co-channel, first- and second-adjacent channels and IF on LPFM stations 101 watts or more	Used for co-channel and first on all radio services including LPFM. Used for second and third on services except LPFM.
Maximum service contour	5.6 km	5.6 km	7.1 km	Non fill-in: 7.3 km on east coast and CA, 13.3 km elsewhere. Fill-in: limited by service contour of primary station.
Maximum ERP	100w	100w	250w	250w
Interference rules	Only actionable on subsequent full-power where city grade or city of license overlap	Only actionable on subsequent full-power where city grade or city of license overlap	Actionable on predicted or actual interference to other services.	Actionable on predicted or actual interference to other services.
Stations within 125 km of Mexico	Maximum 50 watts non-directional	Maximum 100 watts directional except on radials within 125km of Mexico where power is limited to 50 watts.	Maximum 250 watts directional except on radials within 125km of Mexico where power is limited to 50 watts.	Maximum 250 watts directional except on radials within 125km of Mexico where power is limited to 50 watts.

§73.815 REGIME IS REQUIRED IF §73.807(a/b/c) NEW OR INCREASED SHORT SPACING OR REQUESTING MORE THAN 100W at 30M HAAT.

	Current LPFM rules	Proposed §73.807 Regime	Proposed §73.815 Regime	Current FM Translator Rules
Directional antenna usage	Allowed for TIS and second-adjacent waivers	Allowed for TIS, second-adjacent channel waiver, international agreements.	Allowed for TIS, second-adjacent channel waiver, protecting with contours and international agreements.	Allowed for any reason.
Channel 6 Protection	Minimum distance separation.	Minimum distance separation, contour overlap or coordination with affected station.	Minimum distance separation, contour overlap or coordination with affected station.	Minimum distance separation, contour overlap or coordination with affected station.
Minor Move	5.6 km limit.	Any location as long as there is overlap of the current and proposed location's service contours	Any location as long as there is overlap of the current and proposed location's service contours	Any location as long as there is overlap of the current and proposed location's service contours
Period of construction	Original 18 months extendable to 36. Modifications: 18 months	36 months for all construction permits.	36 months for all construction permits.	36 months for all construction permits.
Restrictions on assignments of unbuilt original CPs	Not allowed.	Allowed after 18 months of grant.	Allowed after 18 months of grant.	No restrictions.
Restrictions on assignments of license for a constructed facility	Allowed after 3 years.	Allowed at any time. If CP was granted based on points and within the first 4 years, assignee must qualify for same or more points.	Allowed at any time. If CP was granted based on points and within the first 4 years, assignee must qualify for same or more points.	No restrictions.

§73.815 REGIME IS REQUIRED IF §73.807(a/b/c) NEW OR INCREASED SHORT SPACING OR REQUESTING MORE THAN 100W at 30M HAAT.